



Strong. Smart. Beautiful.

T7XE-01 TREADMILL SERVICE MANUAL

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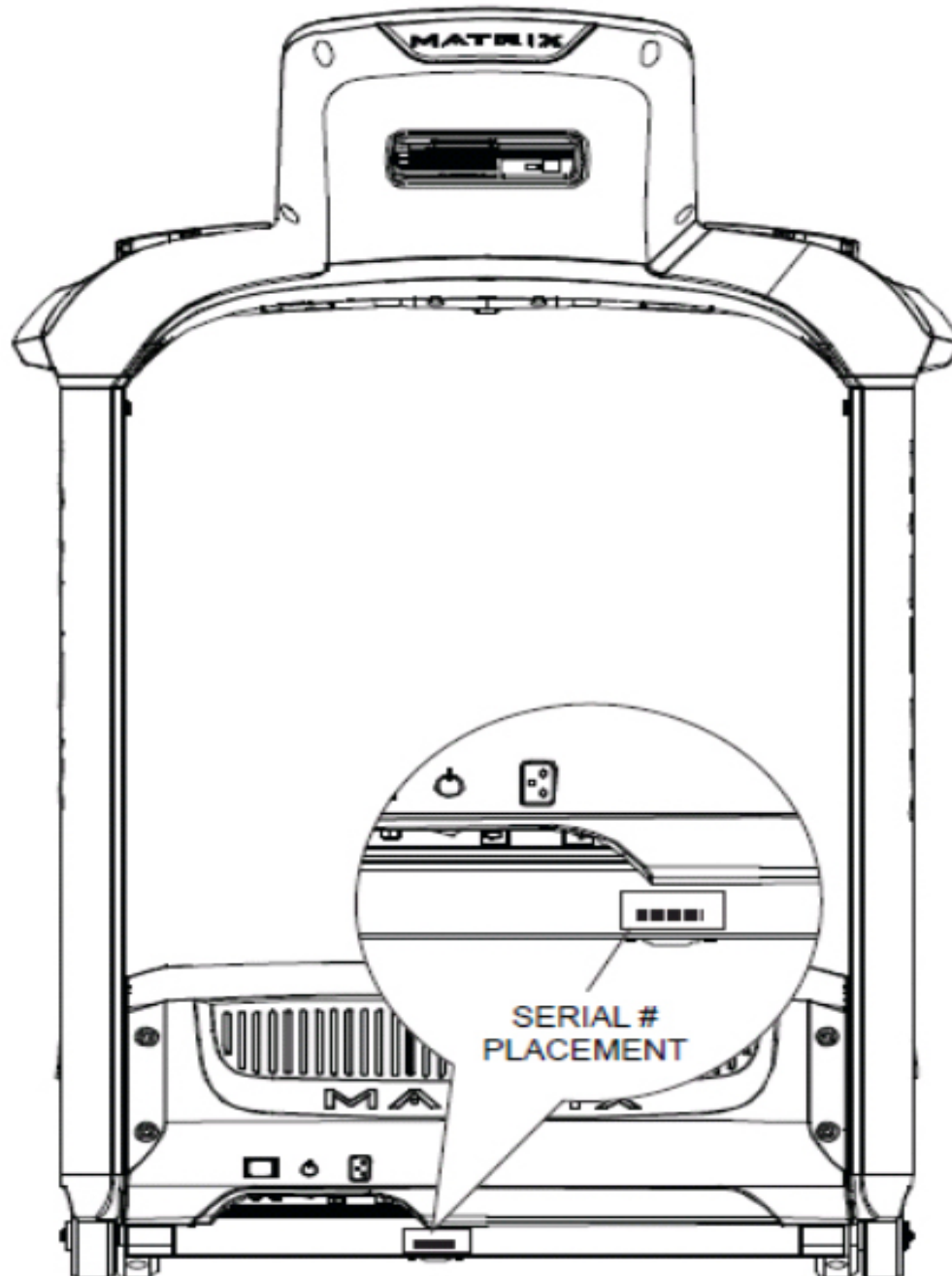
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CHAPTER 1: SERIAL NUMBER LOCATION

1.1 SERIAL NUMBER LOCATION

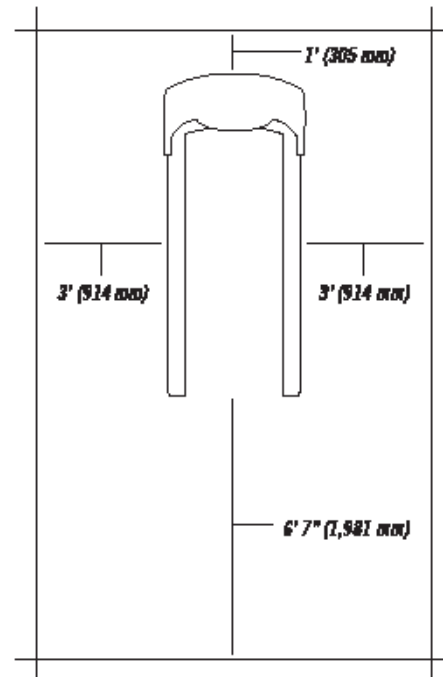


CHAPTER 2: IMPORTANT SAFETY INSTRUCTIONS

2.1 LEGAL DISCLAIMER

2.2 BEFORE GETTING STARTED

This treadmill is intended for commercial use. To ensure your safety and protect the equipment, read all instructions before operating the Matrix Treadmill.



Please leave a 78.75" (2000 mm) x 39.50" (1000 mm) landing zone behind the treadmill. This zone is to allow easy access to the treadmill and gives the user an easy exit path from the machine. In case of an emergency, place both hands on the side arm rests to hold yourself up and place your feet onto the side rails.

CHAPTER 2: IMPORTANT SAFETY INSTRUCTIONS

2.3 READ AND SAVE THESE INSTRUCTIONS

This treadmill is intended for commercial use. To ensure your safety and protect the equipment, read all instructions before operating the MATRIX T7xe-01 treadmill. When using an electrical product, basic precautions should always be followed including the following:

DANGER: To reduce the risk of electric shock: Always unplug this equipment from the electrical outlet immediately after using and before cleaning.

WARNING: To reduce the risk of burns, fire, electrical shock or injury to persons that may be associated with using this product.

An appliance should never be left unattended when plugged in. Unplug from the outlet when not in use and before putting on or taking off parts.

This product must be used for its intended purpose described in this service manual. Do not use other attachments that are not recommended by the manufacturer. Attachments may cause injury.

To prevent electrical shock, never drop or insert any object into any opening.

Do not remove the console covers. Service should only be done by an authorized service technician.

Never operate the treadmill with the air opening blocked. Keep the air opening clear, free of lint and hair.

Never operate product if it has a damaged cord or plug, if it is working improperly, if it has been damaged, or immersed in water.

Do not carry this unit by its supply cord or use the cord as a handle.

Keep any power cord away from heated surfaces.

Close supervision is necessary when the treadmill is used by or near children or disabled persons.

Do not use outdoors.

Do not operate where aerosol (spray) products are being used or when oxygen is being administered.

To disconnect, turn all controls to the off position, then remove plug from the outlet.

Connect this treadmill to properly grounded outlets only.

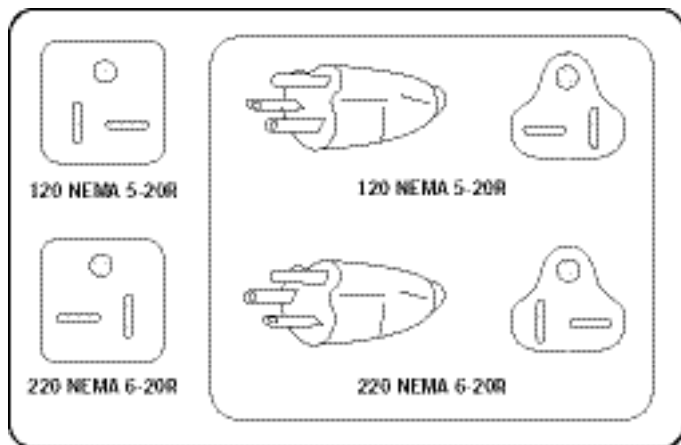
CAUTION: If you experience chest pain, nausea, dizziness or shortness of breath, STOP exercising immediately and consult a physician before continuing.

- Do not use the equipment in any way other than designed or intended by the manufacturer. It is imperative that all Matrix Fitness Systems equipment is used properly to avoid injury.
- Keep hands and feet clear of moving parts at all times to avoid injury.
- Unsupervised children must be kept away from this equipment.
- Do not wear loose clothing while on equipment.

CHAPTER 2: IMPORTANT SAFETY INSTRUCTIONS

2.4 ELECTRICAL REQUIREMENTS

For your safety and to ensure good treadmill performance, the ground on this circuit must be non-looped. Please refer to NEC article 210-21 and 210-23. Your treadmill is provided with a power cord with a plug listed below and requires the listed outlet. Any alterations of this power cord could void all warranties of this product..



MATRIX DEDICATED CIRCUIT / ELECTRICAL REQUIREMENT INFO

All Matrix treadmills require the use of a 20 amp "dedicated circuit"; with a non-looped (isolated) neutral / ground, for the power requirement. Quite simply this means that each outlet you plug your treadmill into should not have anything else running on that same circuit. The easiest way to verify this is to locate the main circuit breaker box, and turn off the breaker(s) one at a time. Once a breaker has been turned off, the only thing that should not have power to it is the treadmill. No lamps, vending machines, fans, sound systems, or any other item should lose power when you perform this test.

Non-looped (isolated) neutral / grounding means that each circuit must have an individual neutral / ground connection coming from it, and terminating at an approved earth ground. You cannot "jumper" a single neutral / ground from one circuit to the next.

In addition to the dedicated circuit requirement, the proper gauge wire must be used from the circuit breaker box, to each outlet that will have the maximum number of units running off of it. If the distance from the circuit breaker box, to each outlet, is 100 feet or less, then 12 gauge wire may be used. For any distance greater than 100 feet from the circuit breaker box to the outlet, 10 gauge wire must be used.

CHAPTER 3: PREVENTATIVE MAINTENANCE

3.1 RECOMMENDED CLEANING TIPS

Preventative maintenance and daily cleaning will prolong the life and look of your MATRIX treadmill.

Please read and follow these tips.

- Position the equipment away from direct sunlight. The intense UV light can cause discoloration on plastics.
- Locate your equipment in an area with cool temperatures and low humidity.
- Clean with a soft 100% cotton cloth.
- Clean with soap and water or other non-ammonia based all purpose cleaners.
- Wipe foot rails, console, heart rate grips, and handlebars clean after each use.
- Do not pour liquids directly onto your equipment. This can cause damage to the equipment and in some cases electrocution.
- Check running belt for proper tension and routing.
- Adjust leveling feet when equipment wobbles or rocks.
- Maintain a clean area around equipment, free from dust and dirt.

3.2 CHECK FOR DAMAGED PARTS

DO NOT use any equipment that is damaged or has worn or broken parts. Use only replacement parts supplied by Matrix Fitness Systems.

MAINTAIN LABELS AND NAMEPLATES. Do not remove labels for any reason. They contain important information. If unreadable or missing, contact Matrix Fitness Systems for a replacement at 866-693-4863 or www.matrixfitness.com.

MAINTAIN ALL EQUIPMENT. Preventative maintenance is the key to smoothly operating equipment. Equipment needs to be inspected at regular intervals. Defective components must be kept out of use until they are repaired. Ensure that any person(s) making adjustments or performing maintenance or repair of any kind is qualified to do so. Matrix Fitness Systems will provide service and maintenance training at our corporate facility upon request or in the field if proper arrangements are made.

CHAPTER 3: PREVENTATIVE MAINTENANCE

3.3 CARE AND MAINTENANCE INSTRUCTIONS

In order to maximize life span, and minimize down time, all MATRIX equipment requires regular cleaning, and maintenance items performed on a scheduled basis. This section contains detailed instructions on how to perform these items, the frequency of which they should be done, and a check list to sign off on each time service is completed for a specific machine. Some basic tools and supplies will be necessary to perform these tasks which include (but may not be limited to):

- * Metric Allen wrenches
- * #2 Phillips head screwdriver
- * Adjustable wrench
- * Torque wrench (capability to read foot lbs and inch lbs)
- * Lint free cleaning cloths
- * Teflon based spray lubricant such as "Super Lube" or other Matrix approved products.
- * Mild water soluble detergent such as "Simple Green" or other Matrix approved products
- * Vacuum cleaner with an extendable hose and crevasse tool attachment.

Please find the worksheet sample for our equipment provided in this manual and make copies as needed, keeping them up to date as required service / maintenance items are performed. It is critical that you also log the accumulated amount of miles or running hours on the equipment each time service or maintenance is performed.

You may periodically see addendums to this document, as the Matrix Technical Support Team identifies items that require specific attention, the latest version will always be available on the Matrix web site at www.matrixfitness.com.

DAILY MAINTENANCE ITEMS

- 1) Clean the entire machine using water and mild detergent such as "Simple Green", or other Matrix approved solutions (cleaning agents MUST be alcohol and ammonia free).
- 2) Check the emergency stop button and cord for proper operation.

MONTHLY MAINTENANCE ITEMS

- 1) Inspect the power cord for damage, inspect hand grip areas, and inspect the emergency stop button and cord for proper operation.
- 2) Check the running belt for proper tension, adjust as needed.

QUARTERLY MAINTENANCE ITEMS

- 1) Remove the front plastic shroud, and vacuum the entire motor area. Be careful when working around the MCB not to bump any wires or connections loose.

2) Check the drive belt for visible wear, ie, cracking, tears, etc. The belt should be replaced if there are any visible signs of damage. Proper alignment of the pulley / tensioner should be verified at this time as well.

3) Remove the plastic shroud at the front of the machine. Start the unit and raise incline settings to maximum height. Turn the power switch off at the front of the machine to prevent it from lowering accidentally. Lubricate the incline motor Acme screw (Matrix recommends Super Lube brand grease with PTFE additive).

BIANNUAL MAINTENANCE ITEMS

- 1) Remove wax build up from the front and rear rollers of the machine.
- 2) Inspect the underside of the running belt for damage, check for cracking or glazed surfaces.
- 3) If the belt has damage or wear to it that warrants replacement, note that the running deck must also be flipped when a new belt is installed. If the deck has previously been flipped and no longer has an unused side available, it needs to be replaced when the new belt is installed. A new belt must ALWAYS be installed to run on a new deck surface in order to maximize the lifespan of both items.
- 4) During normal operating conditions, the running belt replacement and deck service should be done every 25,000 miles.

3.4 PREVENTATIVE MAINTENANCE CHECKLIST

MAKE:	MODEL:	S/N:
LOCATION:	TECHNICIAN	DATE:

Inspect power cord _____

Check E-stop cord/button _____

Check hand grips _____

Vacuum under cover _____

Check motor drive belt _____

Check running belt _____

Lubricate incline rack screw _____

Flip / replace deck _____

De-wax rollers _____

Notes / Comments _____

3.5 TOUCH SCREEN CARE & CLEANING

TOUCH SCREEN CARE AND CLEANING

- * The touch screen requires very little maintenance. We recommend that you periodically clean the touch screen surface with a dry soft cloth. If necessary, we recommend the usage of Alcohol or Isopropyl Alcohol for difficult stains or sanitary purposes.
- * It is very important to avoid using any other chemical on the touch screen.
- * Always dampen the cloth and clean the screen. Do not spray the cleaning agent on the screen itself, the drips can seep into the display or stain the bezel.
- * After cleaning, make sure the surface is dry. There should not be any left over solvent to seep into the display.
- * It is very important to handle the touch screen with care. Do not use excessive force when cleaning.
- * Do not use any sharp materials to clean the touch screen surfaces.
- * Do not use high pressure air, water, or steam to clean the touch screen surface.

CHAPTER 3: PREVENTATIVE MAINTENANCE

3.6 AUTO CALIBRATION INSTRUCTIONS

Run Auto Calibration to calibrate incline after assembly and after replacing any electronic component.

AUTO CALIBRATION PROCEDURE:

- 1) Press "ENTER, 2, 0, 0, 1, ENTER". Engineering Mode will appear on the display.
- 2) CALIBRATION and AUTO CALIBRATION should be already highlighted. You just need to press the START button (Figure A). You SHOULD NOT be standing on the unit while it is calibrating.
- 3) After completion, the display will state either Complete or Auto Calibration failed.



3.7 ADJUSTING THE RUNNING BELT

After placing the treadmill in the position it will be used, the belt must be checked for proper tension and centering. The belt may need to be adjusted after the first 2 hours of use. Temperature, humidity, and use cause the belt to stretch at different rates. If the belt starts to slip when a user is on it, be sure to follow the directions below.

STEP 1: Locate the two hex head bolts on the rear of the treadmill. The bolts are located at each end of the frame at the back of the treadmill. These bolts adjust the rear roller. Do not adjust until the treadmill is on. This will prevent over tightening of one side.

STEP 2: The belt should have equal distance on either side between the frame. If the belt is touching one side, do not start the treadmill. Turn the bolts counter clockwise approximately one full turn on each side. Manually center the belt by pushing the belt from side to side. Tighten the bolts the same amount as when the user loosened them, approximately one full turn. Inspect the belt for damage.

STEP 3: While the treadmill is running at 3 mph, observe the belt position. If it is moving to the right, tighten the right bolt by turning it clockwise 1/4 turn, and loosen the left bolt 1/4 turn. If it is moving to the left, tighten the left bolt by turning it clockwise 1/4 turn and loosen the right 1/4 turn. Repeat Step 3 until the belt remains centered for several minutes.

STEP 4: Check the tension of the belt. The belt should be very snug. When a person walks or runs on the belt, it should not hesitate or slip. If this occurs, tighten the belt by turning both bolts clockwise 1/4 turn. Repeat if necessary.

CHAPTER 4: CONSOLE OVERLAY AND WORKOUT DESCRIPTION

4.1 T7XE-01 CONSOLE DESCRIPTION

The Matrix treadmill is inspected before it is packaged. It is shipped in four pieces: the base, the upright console supports, the handlebar, and the console. Carefully unpack the unit and dispose of the box material.



The T7xe-01 has a fully integrated touch screen display. All information required for workouts is explained on screen. Exploration of the interface is highly encouraged. The information explaining how to program for various workouts will give an explanation about the contents of each screen on the T7xe-01.

QUICK START / GO: One touch Start and Quick Start.

STOP: Ends workout and shows workout summary data.

COOL DOWN: Puts treadmill into Cool Down mode. Cool Down time is dependent on the length of the workout. Workouts 19 minutes and shorter will have a cool down length of 2 minutes. Workouts 20 minutes and longer will have a cool down length of 5 minutes.

EMERGENCY STOP / IMMOBILIZATION: To stop all functions and immobilize the unit. The emergency stop on this treadmill must be returned to its original position in order to allow normal operation of the unit.

T7XE ENTERTAINMENT ZONE

iPOD: Will take the user directly to the iPod screen to allow for iPod control and play list selection.

VOLUME UP / DOWN: Adjust the volume output through the headphone jack of either the integrated console TV or the iPod output.

NUMBER KEYPAD: Allows for easy TV channel selections. These buttons work for the integrated console TV.

CHANNEL UP / DOWN: Allows for channel selection on the integrated console TV.

DISPLAY MODE: Allows user to cycle through console display options, iPod, TV, or profile display.

LAST CHANNEL: Allows the user to cycle between the current channel and the previous channel they were viewing.

CHAPTER 4: CONSOLE OVERLAY AND WORKOUT DESCRIPTION

4.2 MANUAL WORKOUT OPERATION

QUICK START OPERATION

Press the GO or QUICK START button(s) and the treadmill will count down "3, 2, 1" and enter into a manual mode of operation. All energy expenditure values will be calculated using the default weight measurement.

MANUAL WORKOUT OPERATION

Manual is a workout that allows you to manually adjust the speed and incline values at anytime. The manual workout also contains a setup screen which allows you to input your weight to help calculate a more accurate caloric burn rate.

To enter into the Manual Workout:

- 1) Choose MANUAL WORKOUT by selecting the manual workout button.
- 2) Enter the desired workout time using the ARROW KEYS or the SLIDER.
- 3) Enter the user's weight (the user's weight is used to calculate the caloric expenditure value-providing an accurate weight helps to ensure an accurate caloric expenditure rating for each user) using the ARROW KEYS or the SLIDER.
- 4) Enter the desired start speed using the ARROW KEYS or the SLIDER.
- 5) Press GO or QUICK START to begin the workout.

4.3 OPERATING LEVEL BASED PROGRAMS

Your Matrix treadmill offers a variety of level-based workouts to challenge users of all fitness levels. The following information will briefly explain the workout and how to program the treadmill for each workout selection.

ROLLING HILLS WORKOUT OPERATION

Rolling Hills is a level based workout that automatically adjusts the incline value to simulate walking or running up hills.

- 1) Choose ROLLING HILLS by selecting the rolling hills workout button.
- 2) Enter the desired workout time using the ARROW KEYS or the SLIDER.
- 3) Enter the desired workout level using the ARROW KEYS or the SLIDER.
- 4) Enter the user's weight (the user's weight is used to calculate the caloric expenditure value, providing an accurate weight helps to ensure an accurate caloric expenditure rating for each user) using the ARROW KEYS or the SLIDER.
- 5) Enter the desired start speed using the ARROW KEYS or the SLIDER.
- 6) Press GO or QUICK START to begin the workout.

FAT BURN WORKOUT OPERATION

Fat Burn is a level-based workout that is designed to help users burn fat through various incline changes.

- 1) Choose FAT BURN by selecting the fat burn workout button.
- 2) Enter the desired workout time using the ARROW KEYS or the SLIDER.
- 3) Enter the desired workout level using the ARROW KEYS or the SLIDER.
- 4) Enter the user's weight (the user's weight is used to calculate the caloric expenditure value, providing an accurate weight helps to ensure an accurate caloric expenditure rating for each user) using the ARROW KEYS or the SLIDER.
- 5) Enter the desired start speed using the ARROW KEYS or the SLIDER.
- 6) Press GO or QUICK START to begin the workout.

5K RUN WORKOUT OPERATION

5K Run is a workout with a fixed distance of 5 km. Incline is adjusted automatically throughout the workout. You control the speed.

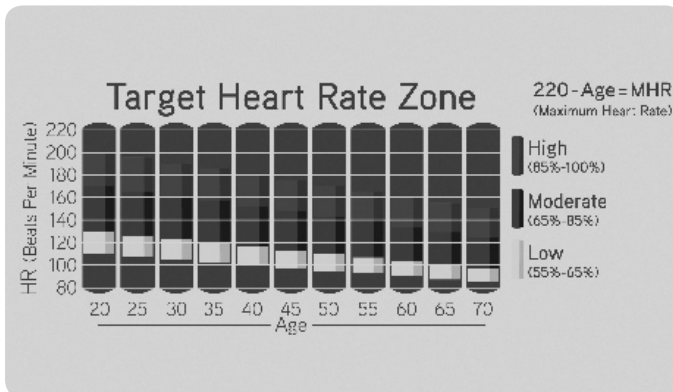
- 1) Choose 5K RUN by selecting the 5k run workout button.
- 2) Enter the desired workout level using the ARROW KEYS or the SLIDER.
- 3) Enter the user's weight (the user's weight is used to calculate the caloric expenditure value, providing an accurate weight helps to ensure an accurate caloric expenditure rating for each user) using the ARROW KEYS or the SLIDER.
- 4) Enter the desired start speed using the ARROW KEYS or the SLIDER.
- 5) Press GO or QUICK START to begin the workout.

CHAPTER 4: CONSOLE OVERLAY AND WORKOUT DESCRIPTION

4.4 HEART RATE CONTROL WORKOUT OPERATION

Your Matrix treadmill offers a heart rate control workout mode. The heart rate control workout mode allows the user to program their desired heart rate zone and maximum allowable incline and the treadmill will automatically adjust the incline based upon the user's heart rate. The heart rate zone is calculated using the following equation: $(220 - \text{Age}) \times \% = \text{target heart rate zone}$. The user must wear a telemetric heart rate monitor or continually hold onto the contact heart rate grips for this workout.

- 1) Choose TARGET HEART RATE by selecting the target heart rate workout button.
- 2) Enter the desired workout time using the ARROW KEYS or the SLIDER.
- 3) Enter the user's age using the ARROW KEYS or the SLIDER.
- 3) Enter the desired percentage of maximum heart rate using the ARROW KEYS or the SLIDER.
- 4) Enter the user's weight (the user's weight is used to calculate the caloric expenditure value, providing an accurate weight helps to ensure an accurate caloric expenditure rating for each user) using the ARROW KEYS or the SLIDER.
- 5) Press GO or QUICK START to begin the workout.



4.5 FITNESS TEST WORKOUT OPERATION

Your Matrix treadmill offers a variety of fitness tests - the Gerkin Firefighter Protocol, the Army, Navy, USMC, and USAF as well as the Physical Efficiency Battery (PEB).

The Gerkin Protocol was developed by Dr. Richard Gerkin of the Phoenix (Arizona) Fire Department. It is a sub-maximal graded treadmill evaluation used by many Fire Departments across the United States to assess the physical condition of the firefighters. The test requires constant monitoring of the user's heart rate so the use of a telemetric chest strap is highly encouraged. The workout operates as follows:

WARM UP: The warm up is 3 minutes long and runs at 3.0 mph (4.8 kph) and 0% incline.

STAGE 1: At the 3 minute mark, the treadmill will gradually increase speed to 4.5 mph (7.2 kph). The actual test begins at 4.5 mph (7.2 kph).

STAGE 2: After one minute, the treadmill incline will increase to 2%.

STAGE 3: After one minute, the treadmill speed increases to 5.0 mph (8.0 kph).

STAGES 4 THROUGH 11: After every odd minute the treadmill incline will increase by 2%. After every even minute the treadmill speed will increase by 0.5 mph (0.8 kph). Once the user's heart rate exceeds the target heart rate (85% of maximum as determined by the equation $(220 - \text{Age}) \times \% = \text{target heart rate zone}$), the individual continues the evaluation for an additional 15 seconds. During the 15 second period, the evaluation remains at the stage where the target heart rate is exceeded, without any change to speed or incline. If the heart rate does not return to or below the target heart rate, the evaluation ends and the final evaluation stage is recorded. If the heart rate returns to or below the target heart rate, the program continues at the point where it would have been had the program not stabilized for 15 seconds.

TEST COMPLETION: The test is completed when user's heart rate exceeds the target for more than 15 seconds or when the user completes all 11 stages, whichever occurs first. The treadmill will enter a cool down cycle for 3 minutes at 3.0 mph (4.8 kph), 0% incline.

- 1) Choose the GERKIN TEST by pressing the fitness test workout button and then press the GERKIN button.
- 2) Enter the user's age using the ARROW KEYS or the SLIDER.
- 3) Enter the user's weight (the user's weight is used to calculate the caloric expenditure value, providing an accurate weight helps to ensure an accurate caloric expenditure rating for each user) using the ARROW KEYS or the SLIDER.
- 4) Enter the user's gender by pressing the MALE or FEMALE button.
- 5) Press GO or QUICK START to begin the workout.

CHAPTER 4: CONSOLE OVERLAY AND WORKOUT DESCRIPTION

4.5 FITNESS TEST WORKOUT OPERATION - CONTINUED

SUBMAXIMAL TREADMILL EVALUATION CONVERSION TABLE

Stage	Time	Converted VO2max
1	1:00	31.15
2.1	1:15	32.55
2.2	1:30	33.6
2.3	1:45	34.65
2.4	2:00	35.35
3.1	2:15	37.45
3.2	2:30	39.55
3.3	2:45	41.3
3.4	3:00	43.4
4.1	3:15	44.1
4.2	3:30	45.15
4.3	3:45	46.2
4.4	4:00	47.5
5.1	4:15	48.6
5.2	4:30	50
5.3	4:45	51.4
5.4	5:00	52.8
6.1	5:15	53.9
6.2	5:30	54.9
6.3	5:45	56
6.4	6:00	57
7.1	6:15	57.7
7.2	6:30	58.8
7.3	6:45	60.2
7.4	7:00	61.2
8.1	7:15	62.3
8.2	7:30	63.3
8.3	7:45	64
8.4	8:00	65
9.1	8:15	66.5
9.2	8:30	68.2
9.3	8:45	69
9.4	9:00	70.7
10.1	9:15	72.1
10.2	9:30	73.1
10.3	9:45	73.8
10.4	10:00	74.9
11.1	10:15	76.3
11.2	10:30	77.7
11.3	10:45	79.1
11.4	11:00	80

CARDIOVASCULAR FITNESS PERCENTILES

Males:	VO2 max (ml/kg/min)			
	0-29	30-39	40-49	50-59
SUPERIOR	>58.8	>58.9	>55.4	>52.5
	54.0	52.5	50.4	47.1
EXCEL- LENT	51.4	50.3	48.2	45.3
	48.2	46.8	44.1	41.0
GOOD	46.8	44.6	41.8	38.5
	44.2	42.4	39.9	36.7
FAIR	42.5	41.0	38.1	35.2
	41.0	38.9	36.7	33.8
POOR	39.5	37.4	35.1	32.3
	37.1	35.4	33.0	30.2
VERY POOR	34.5	32.5	30.9	28.0
	31.6	30.9	28.3	25.1

Females:	VO2 max (ml/kg/min)			
	20-29	30-39	40-49	50-59
SUPERIOR	>53.0	>48.7	>46.8	>42.0
	46.8	43.9	41.0	36.8
EXCEL- LENT	44.2	41.0	39.5	35.2
	41.0	38.6	36.3	32.3
GOOD	38.1	36.7	33.8	30.9
	36.7	34.6	32.3	29.4
FAIR	35.2	33.8	30.9	28.2
	33.8	32.3	29.5	26.9
POOR	32.3	30.5	28.3	25.5
	30.6	28.7	26.5	24.3
VERY POOR	28.3	26.5	25.1	22.3
	25.9	25.1	23.5	21.1

4.5 FITNESS TEST WORKOUT OPERATION - CONTINUED

The Military Test programs and the Physical Efficiency Battery (PEB) provide workouts of a preset distance. These distances are established by the various branches of the Military with the objective of each test to complete the distance as quickly as possible. At the completion of the test, a time-based score as defined by the respective Military branch will be shown on the console.

- 1) Choose your desired Military Test by pressing the FITNESS TEST WORKOUT button, and then press the desired MILITARY TEST or PEB button.
- 2) Enter the user's age using the ARROW KEYS or the SLIDER.
- 3) Enter the user's weight (the user's weight is used to calculate the caloric expenditure value, providing an accurate weight helps to ensure an accurate caloric expenditure rating for each user) using the ARROW KEYS or the SLIDER.
- 4) Enter the user's gender using the MALE and FEMALE buttons.
- 5) Press GO or QUICK START to begin the workout.

CHAPTER 5: MANAGER MODE

5.1 USING MANAGER MODE



- 1) To enter Manager Mode, press "ENTER 1001 ENTER" on the number keypad and **Manager Mode** will appear on the display.
- 2) Manager Mode is divided into 6 tabs, located on the left side of the screen. They are About, Time, Speed, Defaults, TV, and Language.
- 3) Choose a tab by touching the screen over the desired tab.
- 4) Each of the tabs have options that will appear once you have chosen that particular tab.
- 5) Press **the "HOME" button or the EMERGENCY STOP** to exit Manager Mode..

CHAPTER 5: MANAGER MODE

5.2 MANAGER MODE - TAB 1



MANAGER MODE	FUNCTION & DEFAULTS	DESCRIPTIONS	MODIFIED
About	Serial Number	This option displays the serial number of the platform and console, not editable (see Service Mode to change serial numbers).	Cannot be modified.
	Accumulated Distance	Total distance displayed in native units (miles or kilometers), not editable.	Cannot be modified
	Accumulated Time	Total time, not editable.	Cannot be modified.
	Software Version	Software version, not editable	Cannot be modified
	Out of Order Default: Off	This option allows the club to show "out of order" on the console before repair.	On / Off

CHAPTER 5: MANAGER MODE

5.3 MANAGER MODE - TAB 2



MANAGER MODE	FUNCTION & DEFAULTS	DESCRIPTIONS	MODIFIED
Time	Maximum Time Default: 60 Minutes	This option enables clubs to set the maximum workout duration limits during peak and non peak hours of traffic.	Maximum: 99 Minutes Minimum: 5 Minutes
	Default Time Default: 30 Minutes	This option controls the default program time.	Maximum: Maximum Time Minimum: 5 Minutes
	Pause Time Default: 5 Minutes	This option controls the default pause time.	Maximum: 10 Minutes Minimum: 1 Minute

CHAPTER 5: MANAGER MODE

5.4 MANAGER MODE - TAB 3



MANAGER MODE	FUNCTION & DEFAULTS	DESCRIPTIONS	MODIFIED
Speed	Maximum Speed Default: 12 MPH / 19.3 KPH	This option controls the maximum speed for all programs. Displayed in native units (miles or kilometers).	Maximum: 15 MPH / 24.1 KPH Minimum: 0.5 MPH / 0.8 KPH
	Start Speed Default: 0.5 MPH / 0.8 KPH	This option controls the starting speed for all programs (minimum speed not affected). Displayed in native units (miles or kilometers).	Maximum: 3 MPH / 4.8 KPH Minimum: 0.5 MPH / 0.8 KPH

CHAPTER 5: MANAGER MODE

5.5 MANAGER MODE - TAB 4



MANAGER MODE	FUNCTION & DEFAULTS	DESCRIPTIONS	MODIFIED
Defaults	Default Level Default: 1	This option controls the default program levels.	Maximum: 20 Minimum: 1
	Default Age Default: 30	This option controls the default user's age used in the target heart rate calculations.	Maximum: 100 Minimum: 10
	Default Weight Default: 150 lb / 68 kg	This option controls the default weight used in the calorie calculations. Displayed in native units (pounds or kilograms).	Maximum: 400 lb / 180 kg Minimum: 50 lb / 22 kg
	Gender Default: Male	This option sets the user's gender as either male or female.	Male or Female
	Key Sound Default: On	This option can set the keypad tone to sound or not sound.	ON or OFF

5.6 MANAGER MODE - TAB 5



MANAGER MODE	FUNCTION & DEFAULTS	DESCRIPTIONS	MODIFIED
TV	Default Channel Default: 1	This option controls the default TV channel on start up.	Maximum: 99 Minimum: 1
	Default Volume Default: 1	This option controls the default TV volume on start up.	Maximum: 17 Minimum: 1
	Tuner Available Default: Yes	This option controls the default TV function. If NO is selected, the TV tab will be removed from the normal function.	YES or NO
	Setup	This option is for setting the TV tuner functions. Press the "-" key on the NUMBER KEYPAD to enter this function.	N/A

CHAPTER 5: MANAGER MODE





5.7 MANAGER MODE - TAB 6




MANAGER MODE	FUNCTION & DEFAULTS	DESCRIPTIONS	MODIFIED
Language	Default Language	This option allow the user to select the flag for the specific language shown on the display.	N/A

CHAPTER 5: MANAGER MODE

5.7 MANAGER MODE - TAB 6 - CONTINUED

LANGUAGE	FLAG	UNIT
ENGLISH		MILE
		MILE
		KM
GERMAN		KM
		KM
SPANISH		KM
		KM

LANGUAGE	FLAG	UNIT
CHINESE		KM
		KM
PORTUGUESE		KM
		KM
FRENCH		KM
DUTCH		KM
ITALIAN		KM
JAPANESE		KM

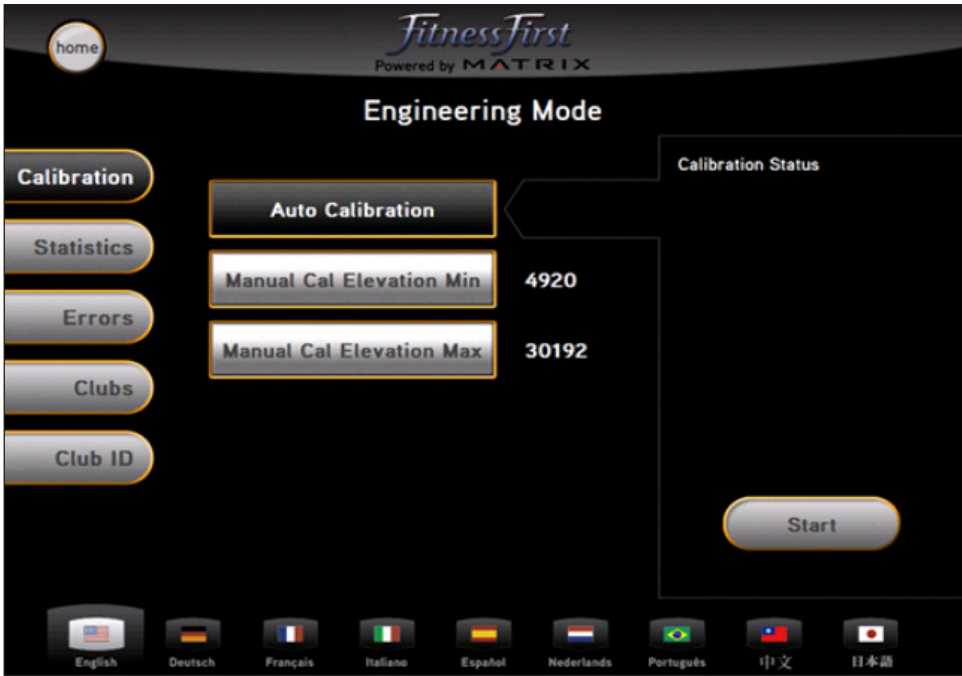
CHAPTER 6: ENGINEERING MODE

6.1 USING ENGINEERING MODE



- 1) To enter Engineering Mode, press "ENTER 2001 ENTER" on the number keypad and **Engineering Mode will** appear on the display.
- 2) Engineering Mode is divided into 5 tabs, located on the left side of the screen. They are Calibration, Statistics, Errors, Clubs, and Club ID.
- 3) Choose a tab by touching the screen over the desired tab.
- 4) Each of the tabs have options that will appear once you have chosen that particular tab.
- 5) Press **the "HOME" button or the EMERGENCY STOP** to exit Engineering Mode..

6.2 ENGINEERING MODE - TAB 1



ENGINEERING MODE	FUNCTION & DEFAULTS	DESCRIPTIONS	MODIFIED
Calibration	Auto Calibration	This option is to calibrate the elevation parameters.	N/A
	Manual Cal Elevation Minimum Default: 4000	This option controls the minimum elevation parameter.	Range: 2500-12000
	Manual Cal Elevation Maximum Default: 29000	This option controls the maximum elevation parameter.	Range: 25000-32700

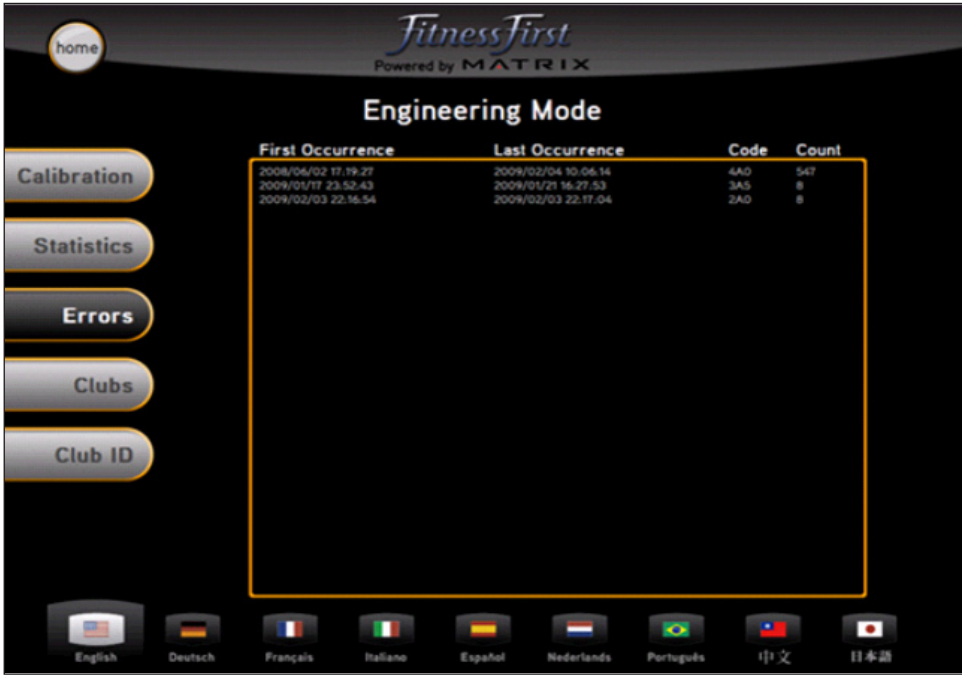
CHAPTER 6: ENGINEERING MODE

6.3 ENGINEERING MODE - TAB 2

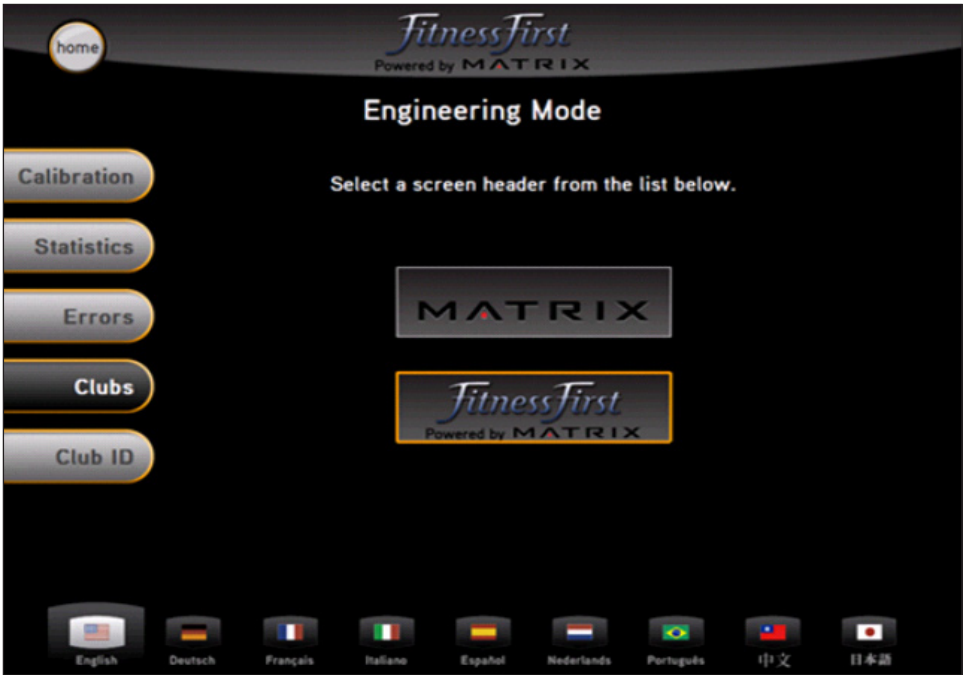


ENGINEERING MODE	FUNCTION & DEFAULTS	DESCRIPTIONS	MODIFIED
	Statistics	This option displays workout information for the various programs.	N/A

6.4 ENGINEERING MODE - TAB 3



ENGINEERING MODE	FUNCTION & DEFAULTS	DESCRIPTIONS	MODIFIED
	Errors	This option displays the error code history on the treadmill.	N/A



ENGINEERING MODE	FUNCTION & DEFAULTS	DESCRIPTIONS	MODIFIED
	Clubs Default: MATRIX	This option allows the user to select the screen header from a list.	N/A

6.6 ENGINEERING MODE - TAB 5



ENGINEERING MODE	FUNCTION & DEFAULTS	DESCRIPTIONS	MODIFIED
	Club ID	This option records the club ID of the fitness facility.	N/A

CHAPTER 7: SERVICE MODE

7.1 USING SERVICE MODE



- 1) To enter Service Mode, press "ENTER 3001 ENTER" on the number keypad and **Service Mode** will appear on the display.
- 2) Service Mode is divided into 4 tabs, located on the left side of the screen. They are Setup, Test, Log, and Date & Time.
- 3) Choose a tab by touching the screen over the desired tab.
- 4) Each of the tabs have options that will appear once you have chosen that particular tab.
- 5) Press **the "HOME" button or the EMERGENCY STOP** to exit Service Mode..

CHAPTER 7: SERVICE MODE

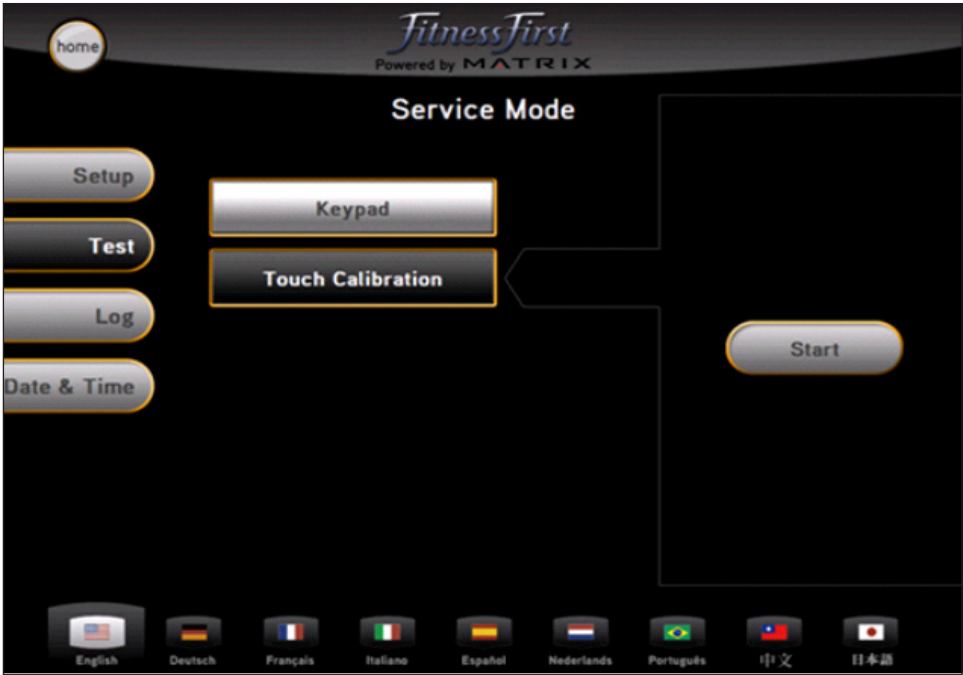
7.2 SERVICE MODE - TAB 1



SERVICE MODE	FUNCTION & DEFAULTS	DESCRIPTIONS	MODIFIED
Setup	Machine Type Default: Treadmill	This option is to select the current model.	N/A
	Serial Number	This option displays the serial number of the console and frame.	N/A
	Accumulated Distance	Total distance displayed in native units (miles or kilometers), not editable.	N/A
	Accumulated Time	Total time, not editable.	N/A
	Show Service on Boot	Factory Setting Only	N/A

CHAPTER 7: SERVICE MODE

7.3 SERVICE MODE - TAB 2



SERVICE MODE	FUNCTION & DEFAULTS	DESCRIPTIONS	MODIFIED
Test	Keypad	This option is for a keypad test.	N/A
	Touch Calibration	This option allows for a touch calibration of the console. Follow the cross mark and touch the screen to catch. After 5 positions are tested, touch the center of the screen to exit this test.	N/A

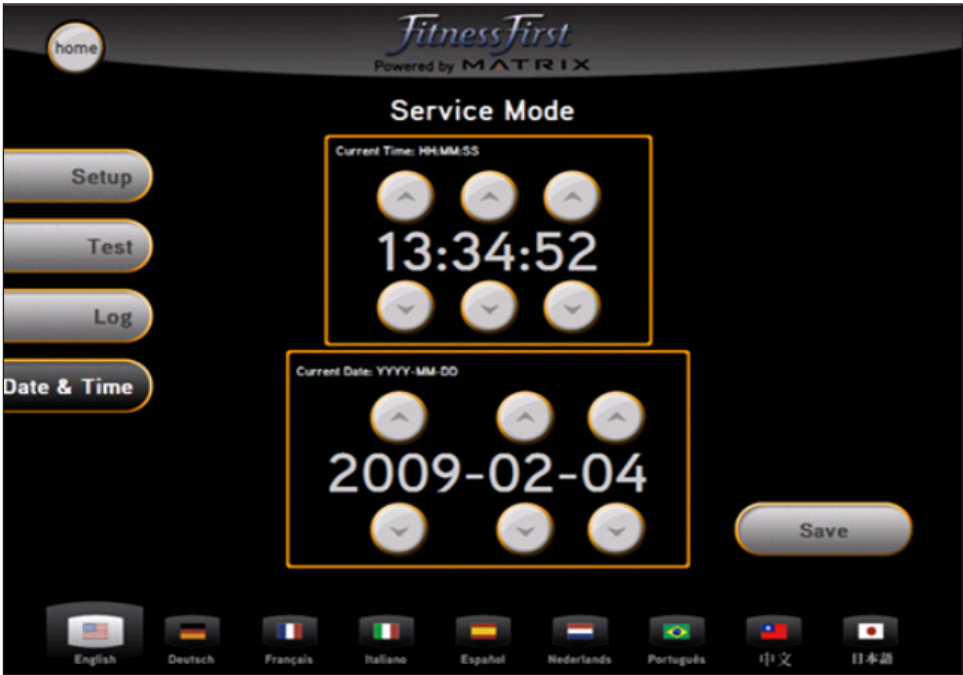
CHAPTER 7: SERVICE MODE

7.4 SERVICE MODE - TAB 3



SERVICE MODE	FUNCTION & DEFAULTS	DESCRIPTIONS	MODIFIED
	Log	This option allows the club to record key components replacement history.	N/A

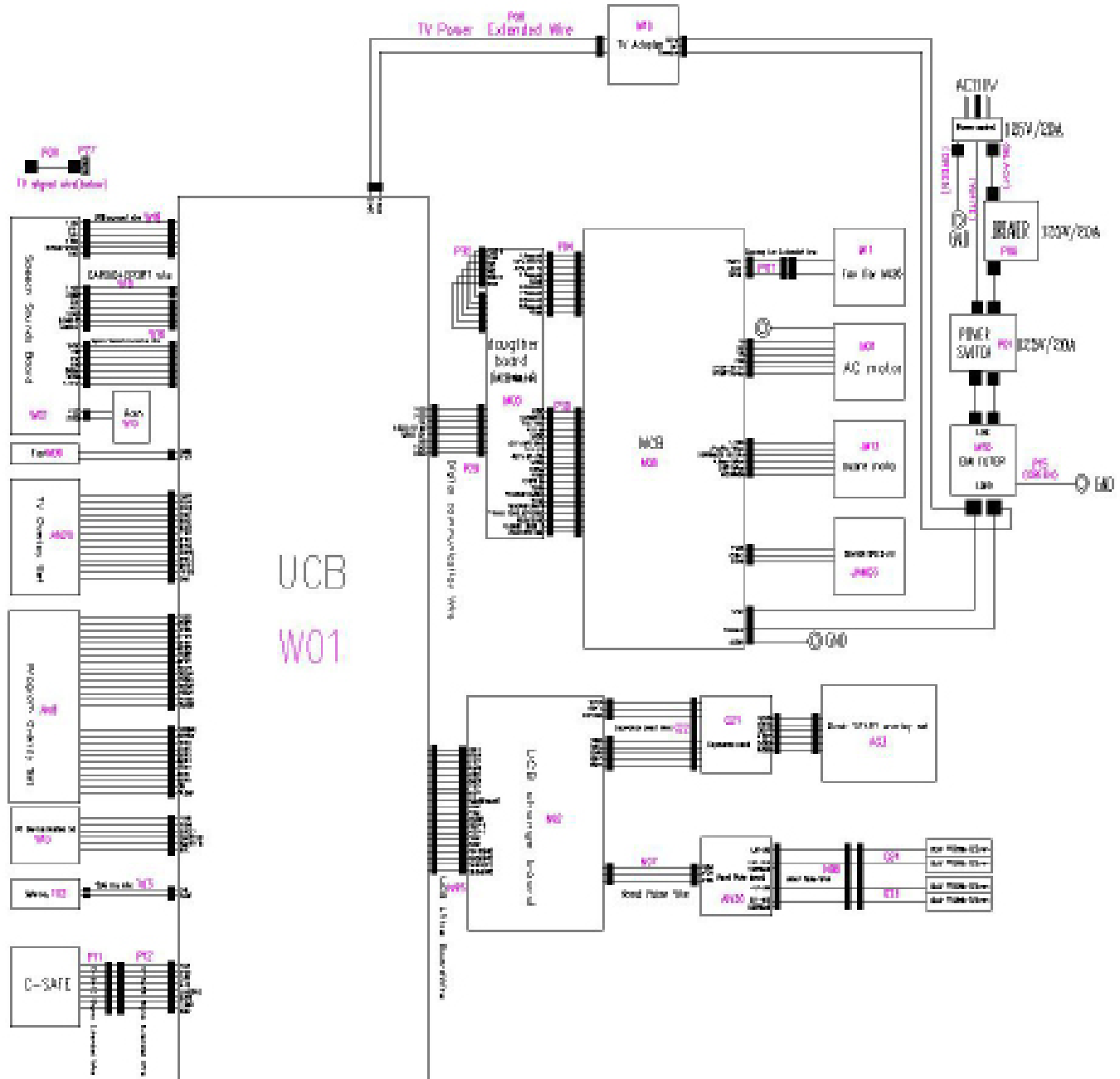
7.5 SERVICE MODE - TAB 4



SERVICE MODE	FUNCTION & DEFAULTS	DESCRIPTIONS	MODIFIED
	Date & Time	This option allows the club to set the current date and time.	N/A

CHAPTER 8: TROUBLESHOOTING

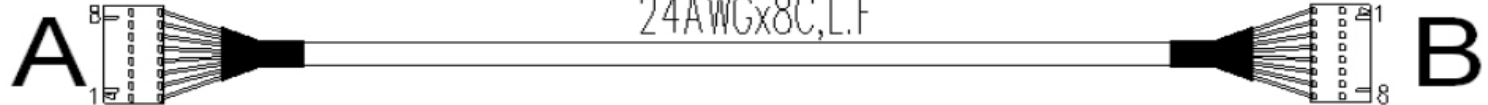
8.1 ELECTRICAL DIAGRAM



P29 -- Digital communication Wire

2000 ± 20

24AWGx8C,L.F

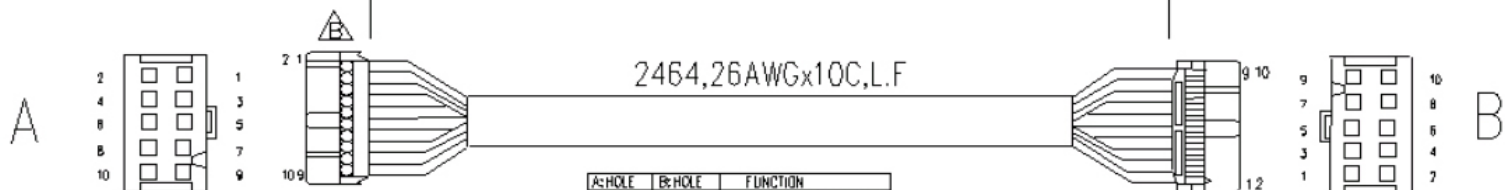


A.HOLE	B.HOLE	FUNCTION	COLOR
1	1	VDD	white orange
2	2	VDD	Orange
3	3	A	white green
4	4	SAFE KEY NC	blue
5	5	SAFE KEY	white blue
6	6	B	green
7	7	GND	white brown
8	8	GND	brown

P04 -- MCB Board Signal Wire

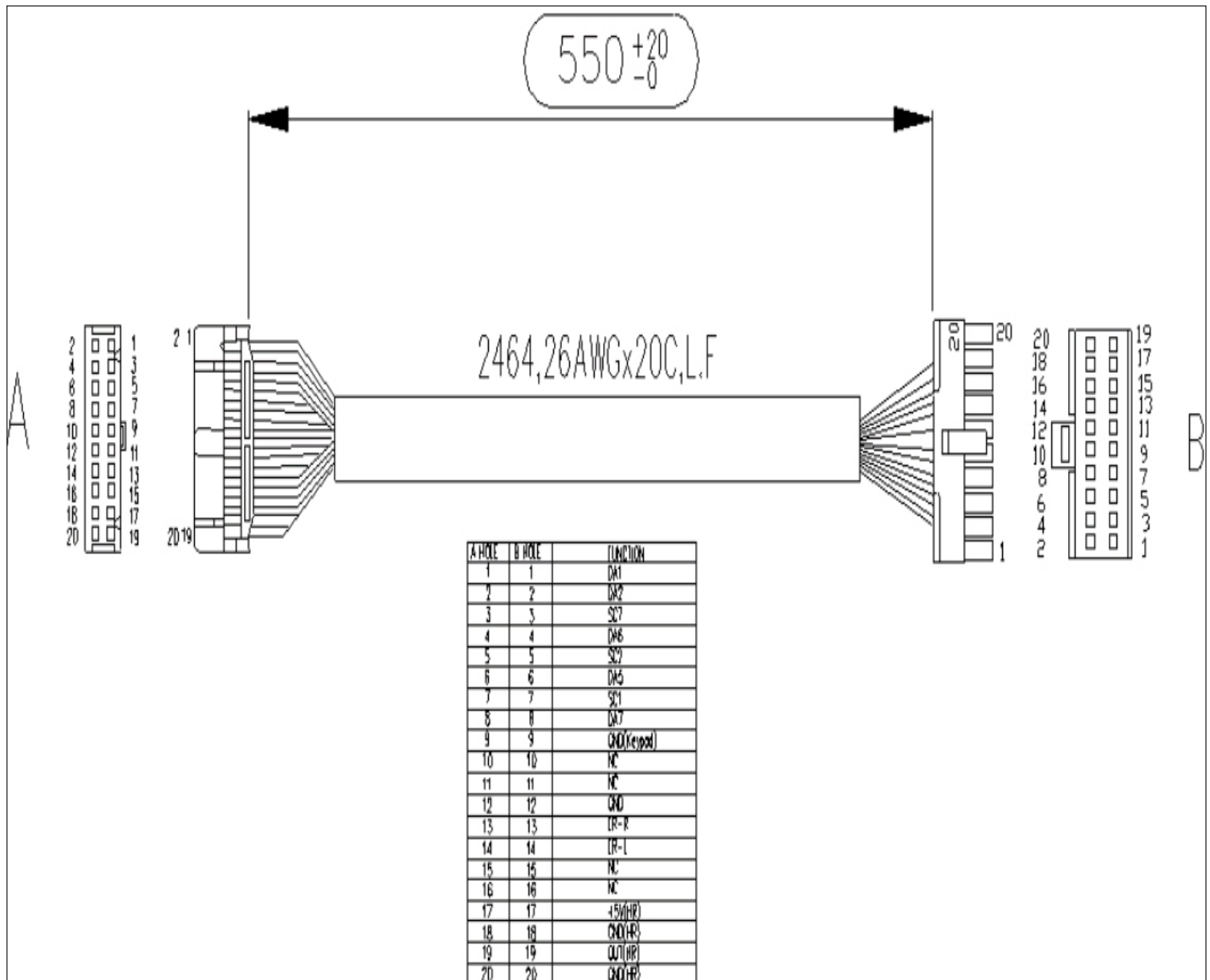
200 ± 10

24&26AWGx10C,L.F

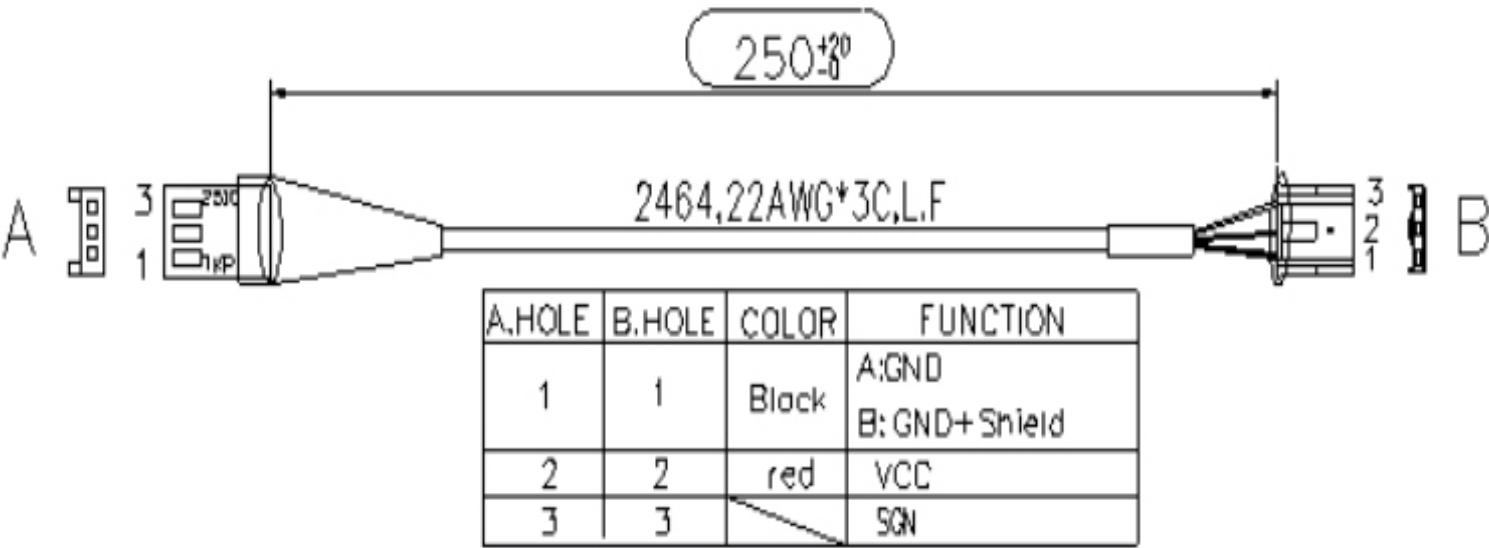


A:HOLE	B:HOLE	FUNCTION
1	1	Reserved, don't connect
2	2	R5-232 Rx
3	3	R5-232 Tx
4	4	Reserved, don't connect
5	5	GND
6	6	Reserved, don't connect
7	7	Reserved, don't connect
8	8	Reserved, don't connect
9	9	Reserved, don't connect
10	10	VIN (not populated)

N95 -- UCB Little Board Wire

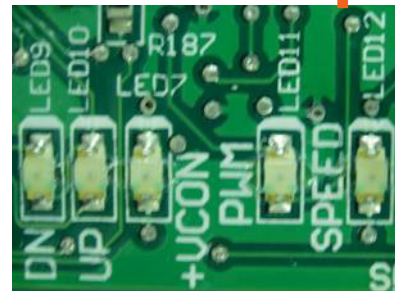
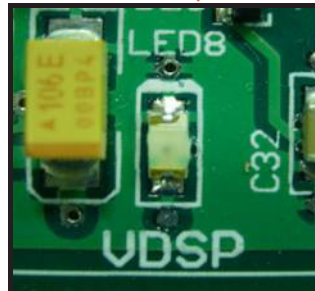
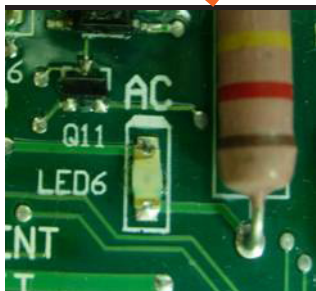
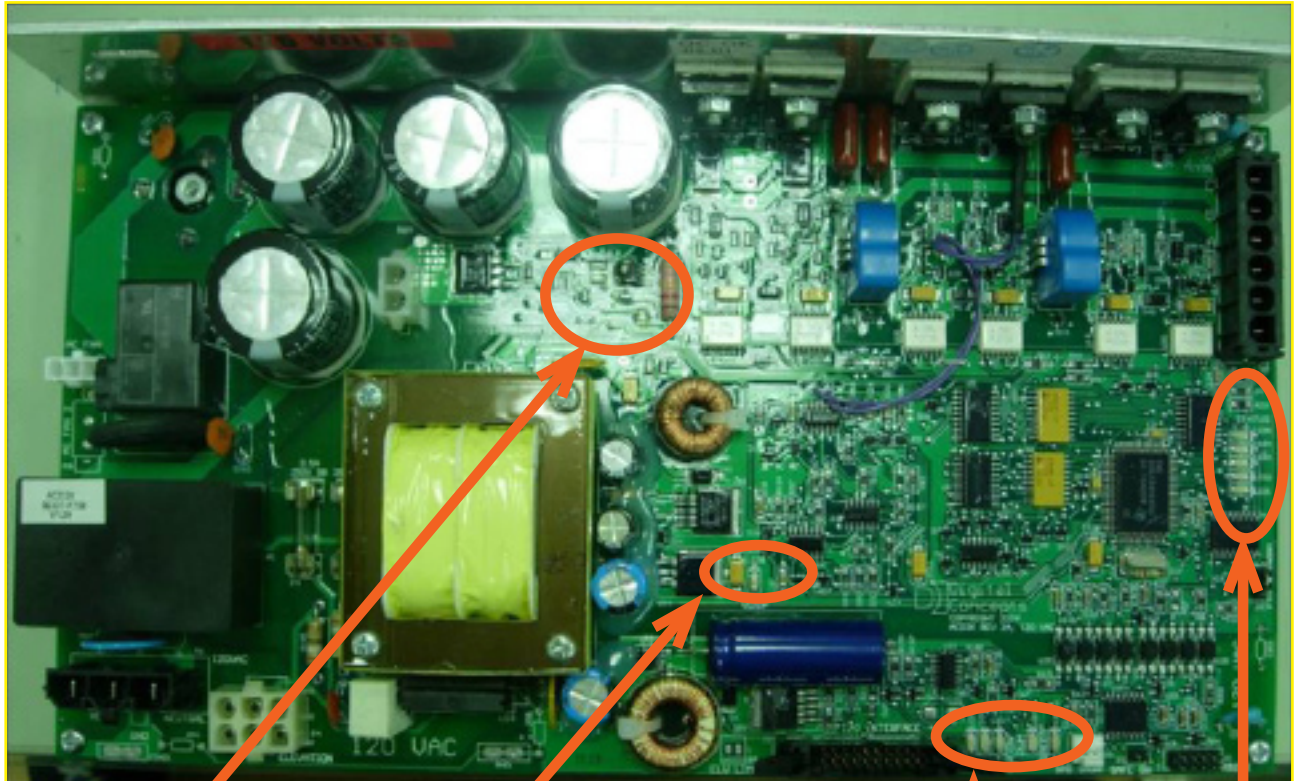


N97 -- Hand Pulse Wire



CHAPTER 8: TROUBLESHOOTING

8.2 MCB LED INSTRUCTIONS



CHAPTER 8: TROUBLESHOOTING

8.2 MCB LED INSTRUCTIONS - CONTINUED

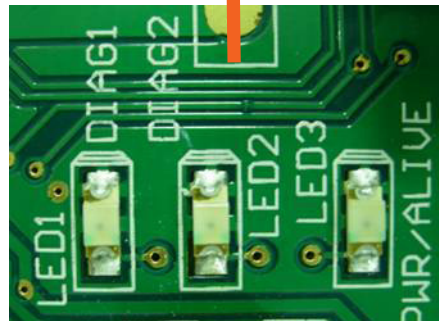
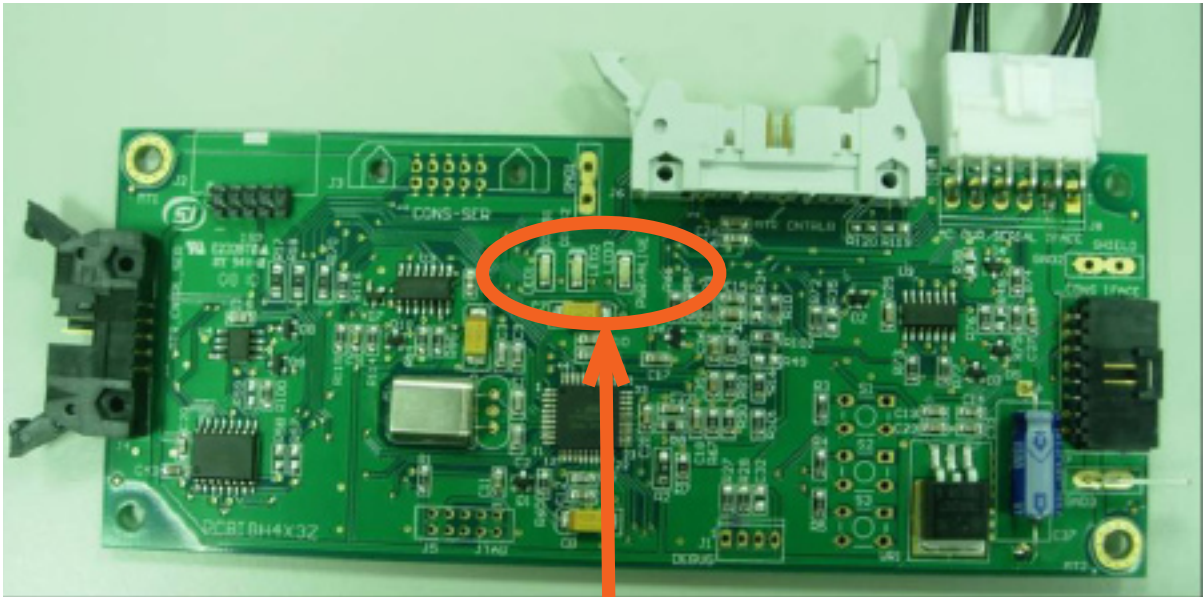
LED	REFERENCE DESIGNATOR	DESCRIPTION
Status	LED 1	Auxiliary Status LED.
Status	LED 2	Auxiliary Status LED.
Status	LED 3	Auxiliary Status LED.
Status	LED 4	Auxiliary Status LED / Digital to Analog Output.
Status	LED 5	Main Status / Error LED.
AC	LED 6	Indicates if the DC Buss is Energized (Voltage Present).
+VCON	LED 7	Indicates if Console Voltage Supply is present.
VDSP	LED 8	Indicates if the DSP Power Supply is present.
Down	LED 9	Indicates if the upper console is commanding Incline Down.
Up	LED 10	Indicates if the upper console is commanding Incline Up.
PWM	LED 11	Indicates if console is commanding speed.
Speed	LED 12	Indicates the motor is moving via the encoder's feedback by blinking.

NORMAL OPERATION

1. LEDs 1, 2, and 3 sequence back and forth to indicate the processor is online and operational.
2. LED 4 is used as a discrete / analog signal to the upper console.
3. LED 5 indicates system status / mode. Currently 3 modes are defined safe mode, stand by mode and run mode. They are defined as follows:
 - a) Safe Mode - When the controller's safety relay is not energized and no error exists, LED 5 remains off.
 - b) Stand By Mode - When the safety relay is engaged but the system is not outputting an active PWM to the motor and no error exists, LED 5 blinks off and on at a fast rate.
 - c) Run Mode - When the system outputs an active PWM Control signal to the motor and no error exists, LED 5 remains ON.
4. LEDs 6, 7, and 8 should be lit if the unit has power. If these LED is dimly lit, reset power. If these lights are not bright, it indicates a faulty LCB.
5. LED 9 should be brightly lit if the console is commanding Incline Down or if the unit is descending.
6. LED 10 should be brightly lit if the console is commanding Incline Up or if the unit is ascending.
7. LED 11 should not be lit. It is used in a different model of treadmill.
8. LED 12 is the speed sensor indicator and should begin blinking when the motor begins to turn. If it does not, replace the speed sensor.

CHAPTER 8: TROUBLESHOOTING

8.3 DAUGHTER BOARD LED INSTRUCTIONS



LED	REFERENCE DESIGNATOR	DESCRIPTION
DIAGNOSTIC 1	LED 1	Indicates the PCB with Daughter Board communication present.
DIAGNOSTIC 2	LED 2	Indicates the MCB with Daughter Board communication present.
POWER / ALIVE	LED 3	Indicates if MCB Voltage Supply is present.

8.4 ERROR MESSAGES ON THE CONSOLE

<i>ERROR CODE</i>	<i>DESCRIPTION</i>
0x01A2	Incline direction is reversed.
0x01A0	Incline motor is disconnected.
0x0140	Incline is stalled.
0x01A1	Calibration on the incline motor has failed.
0x02A0	Speed is commanded but no belt movement detected (could be missing magnet).
0x02AE	Checksum failure on critical NOVRAM loading.
0x02AF	Checksum failure on non-critical NOVRAM loading.
0x029F	Error (Drive Fault Report) created by the motor controller - only used for AC motors.
0x02B1	The emergency circuit on the interface board failed.
0x02B2	The emergency circuit on the interface board active.
0x04A0	The console's communications is lost.
0x04A1	The motor controller board's communication is lost.
0x0441	Receives a command from the console with its correct packet, but the interface board has no function to support it.
0x0442	The received command code from the console is correct and is supported, but it has less or more data arguments.
0x0301	Flash or EEPROM error.
0x3A5	Failed to load program.
0x03A6	Failed to run program.

8.5 ERROR MESSAGE TROUBLESHOOTING

ERROR MESSAGES - 0x01A2, 0x01A0, 0x0140, and 0x01A1.

- 1) CAUSE - Incline direction is reversed.
- 2) SOLUTION:
 - a. Check that the incline motor cable is connected at the MCB.
 - b. Press "ENTER 2001 ENTER". The display should now read Engineering Mode.
 - c. Press the Calibration Tab, then press START. If the calibration passes, delete the error log, unit is operational.
 - e. IF AUTO CALIBRATION FAILS, press MANUAL CAL ELEVATION MIN and press START (Figure A).
 - f. Check to see if the LED UP and DOWN lights are lit on the MCB as you change the Elevation Minimum. If LEDs are not lit, check the console cable and console. If LEDs are lit, replace the incline motor (Figure B).
 - g. If incline motor does not resolve issues, replace MCB.



FIGURE A

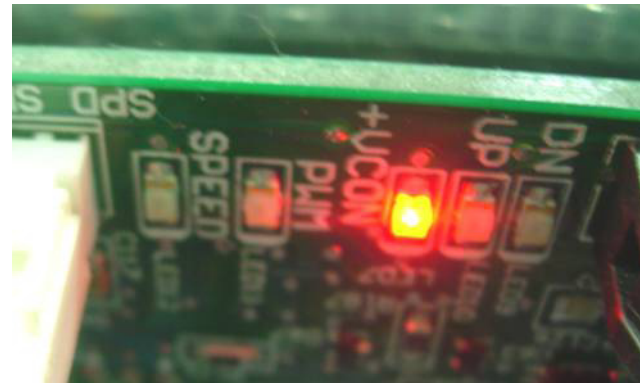


FIGURE B

8.5 ERROR MESSAGE TROUBLESHOOTING - CONTINUED

ERROR MESSAGE 0X02A0

- 1) CAUSE - Speed commanded but no belt movement detected (could be missing sensor).
- 2) SOLUTION:
 - a. Check the connection of the speed sensor cable to the MCB (Figure A)
 - b. Move the running belt, as it moves the MCB Speed LED should flash. If it does not, replace speed sensor. (Figure A)
 - c. If the LED is flashing with belt movement, replace MCB Signal Wire (Figure B).
 - d. Also check the lower control board for errors (see section 8.6).

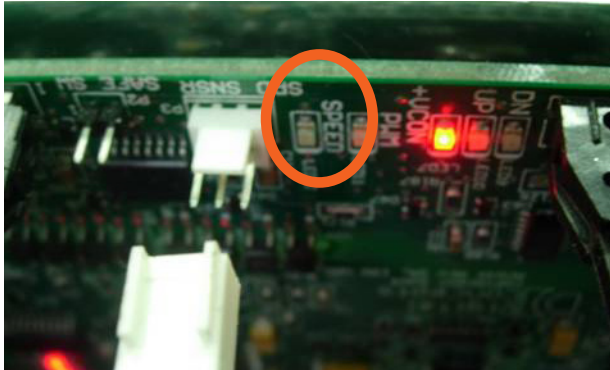


FIGURE A



FIGURE B

ERROR MESSAGES 0X02AE AND 0X02AF

- 1) CAUSE - Checksum failure on critical NOVRAM loading (0x02AE) or Checksum failure on non - critical NOVRAM loading (0x02AF).
- 2) SOLUTION:
 - a. Power the unit off / on.
 - b. If the issue is not resolved by power reset, replace Daughter Board (Figure A).



FIGURE A

8.5 ERROR MESSAGE TROUBLESHOOTING - CONTINUED

ERROR MESSAGE 0X029F

- 1) CAUSE - Error (Drive Fault Report) created by the motor controller - used for AC Motors only.
- 2) SOLUTION:
 - a. Power the unit off / on.
 - b. Move the running belt, as it moves the MCB Speed LED should flash. If it does not, replace speed sensor. (Figure A)
 - c. If the LED is flashing with belt movement, replace MCB Signal Wire (Figure B).

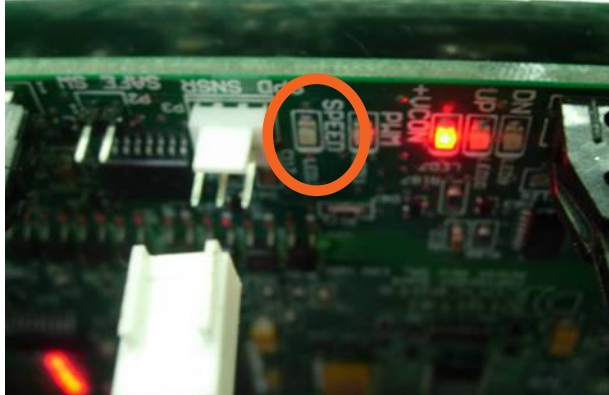


FIGURE A



FIGURE B

ERROR MESSAGES 0x02B1 and 0x02B2

- 1) CAUSE - The emergency circuit on the interface board fails (0x02B1) or the emergency circuit on the interface board active (0x02B2).
- 2) SOLUTION:
 - a. Check the emergency stop for function.
 - b. If emergency stop is not working (always open or closed or a short), replace emergency stop switch (Figure A).
 - c. If emergency stop does not resolve the issue, replace the console.



FIGURE A

8.5 ERROR MESSAGE TROUBLESHOOTING - CONTINUED

ERROR MESSAGE 0x04A0

- 1) CAUSE - The console's communication is lost
- 2) SOLUTION:
 - a. Check the connection and condition of the Digital Communication Wire at the daughter board (Figure A).
 - b. If no signal is present through the Digital Communication Wire, LED 1 on the Daughter Board should be unlit (Figure B).
 - c. Replace Digital Communication Wire.
 - d. Replace the Daughter Board.



FIGURE A - (LEFT SIDE OF DAUGHTER BOARD).

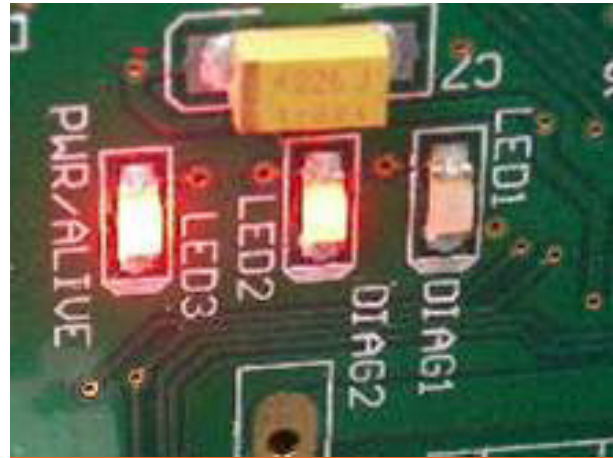


FIGURE B (TOP / MIDDLE OF DAUGHTER BOARD).

8.5 ERROR MESSAGE TROUBLESHOOTING - CONTINUED

ERROR MESSAGE 0x04A1

- 1) CAUSE - The Motor Control Board's communication is lost.
- 2) SOLUTION:
 - a. Check the connection and condition of the MCB signal wire (goes from the Daughter Board to the MCB) (Figure A).
 - b. If no signal is present through the MCB signal wire, LED 2 on the Daughter Board should be unlit (Figure B).
 - c. Replace the MCB signal wire.
 - d. Replace the Daughter Board.



FIGURE A

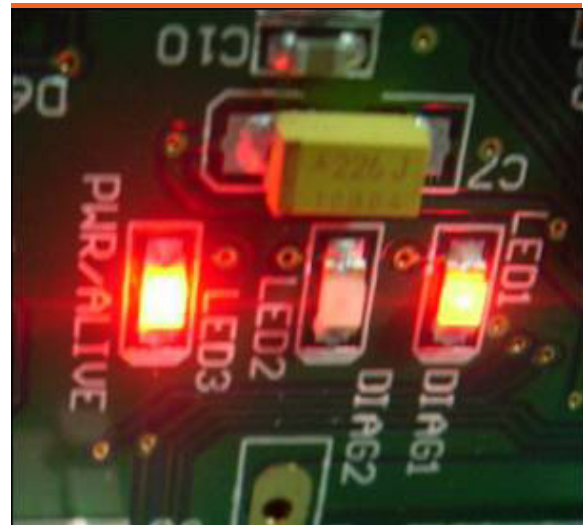


FIGURE B (TOP / MIDDLE OF DAUGHTER BOARD).

8.5 ERROR MESSAGE TROUBLESHOOTING - CONTINUED

ERROR MESSAGE 0x0441 and 0x0442

- 1) CAUSE - A command is received from the console with its correct packet, but the Daughter Board has no function to support it (0x0441) or the received command code from the console is correct and is supported, but it has less or more data arguments.
- 2) SOLUTION:
 - a. Power the unit off / on.
 - b. If the issue is not resolved by a power reset, replace Daughter Board (Figure A).

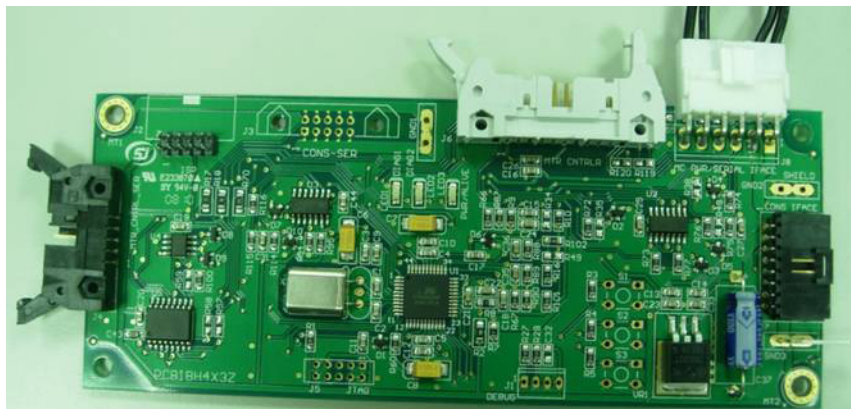


FIGURE A

8.5 ERROR MESSAGE TROUBLESHOOTING - CONTINUED

ERROR MESSAGE 0X0301

- 1) CAUSE - Flash or EEPROM error.
- 2) SOLUTION:
 - a. Power the unit off / on.
 - b. Replace the console.

ERROR MESSAGE 0X3A5

- 1) CAUSE - Failed to load the program.
- 2) SOLUTION:
 - a. Reinstall the console software (see chapter 11).

ERROR MESSAGE 0X3A6

- 1) CAUSE - Failed to run the program.
- 2) SOLUTION:
 - a. Reinstall the console software (see chapter 11).

CHAPTER 8: TROUBLESHOOTING

8.6 ERROR BLINK CODES

NUMBER OF BLINKS	ERROR / FUNCTION	
1	2.5 Vdc Ref Status	Soft Fault
2	1.65 Vdc Ref Status	Soft Fault
3	Phase B Current Sensor	Soft Fault
4	Phase A Current Sensor	Soft Fault
5	Phase C Circuit Open	Soft Fault
6	Phase B Circuit Open	Soft Fault
7	Phase A Circuit Open	Soft Fault
8	DCLink Bus Overvoltage (MAX_VDC1)	Soft Fault
9	Critical DCLink Bus Overvoltage (MAX_VDC1)	Soft Fault
10	DCLink Bus Undervoltage	Soft Fault
11	Illegal Speed Command	Soft Fault
12	Phase Over Current (RMS)	Soft Fault
13	Faulty Speed Sensor	Soft Fault
14	Heat Sink Over Temperature	Hard Fault
15	Over Temp on Motor or Drive	Hard Fault
16	Reserved	N/A
17	Brake Gate Driver Fault	Hard Fault
18	Phase A Low Gate Driver Fault	Hard Fault
19	Phase B Low Gate Driver Fault	Hard Fault
20	Phase C Low Gate Driver Fault	Hard Fault
21	Output Peak Over Current	Hard Fault
22	Phase A High Gate Driver Fault	Hard Fault
23	Phase B High Gate Driver Fault	Hard Fault
24	Phase C High Gate Driver Fault	Hard Fault
25	DCLink Bus Overvoltage	Hard Fault
26	Reserved	N/A
27	Reserved	N/A
28	Reserved	N/A
29	Reserved	N/A
30	Reserved	N/A
31	Reserved	N/A
32	Reserved	N/A

8.7 TROUBLESHOOTING - NO POWER TO CONSOLE

PROBLEM:

No Power to the Console

SOLUTION:

- 1) Check the connection of the console cable at the lower and upper control boards.
- 2) Remove the 4 screws holding the back cover onto the console and remove the cover.
 - a. Use a multi-meter to check the DC voltage at pins 1 and 2 at J9 on the console control board (Figure A). The voltage should be about 12VDC.
 - b. If it is not, replace the console communication cable.
 - c. If it is, replace the console control board.

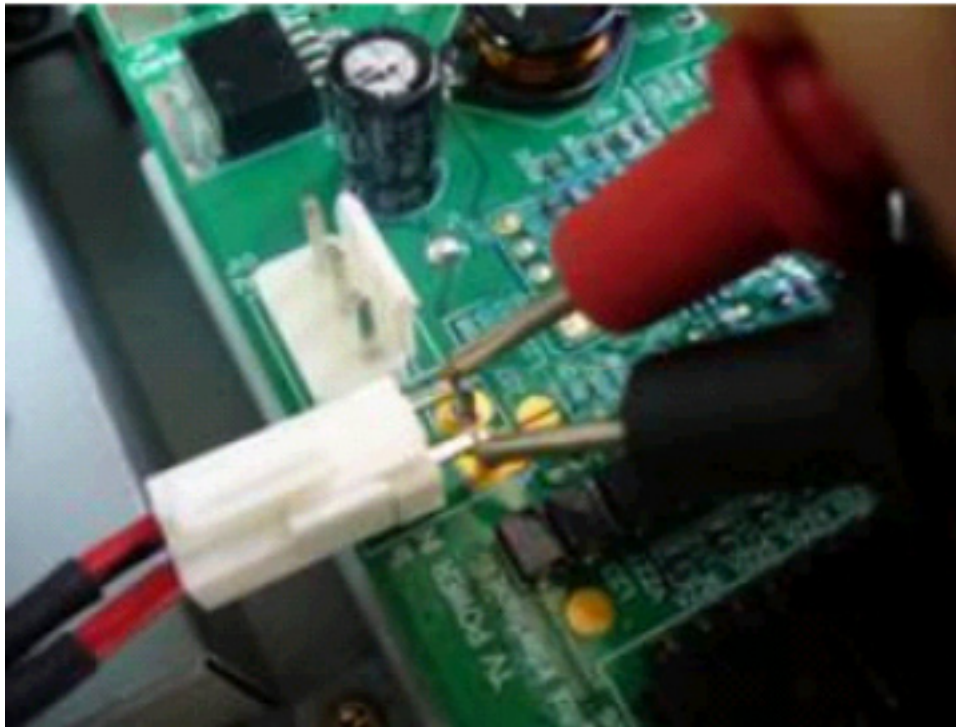


FIGURE A

8.8 TROUBLESHOOTING - FAN NOT WORKING

PROBLEM:

Console fan is not working

SOLUTION:

- 1) Turn on the fan.
 - a. Use a multi-meter to check the DC voltage at pins 1 and 2 at J7 on the console control board. The voltage should be between 7.5 and 11.7 VDC.
 - b. If the voltage is not between 7.5 and 11.7 VDC, replace the console control board.
 - c. If the voltage is between 7.5 and 11.7 VDC, replace the fan.

8.9 TROUBLESHOOTING - EMERGENCY STOP ERROR

PROBLEM:

Emergency stop error. For example, if the console says to release the emergency stop even though it is not tripped.

SOLUTION:

- 1) Check the connection of the emergency stop at the upper control board (Figure A).
- 2) Remove the 4 screws holding the back cover onto the console and remove the cover.
 - a. Disconnect the emergency stop and do an ohm reading with a multi-meter on the emergency stop wire. The switch should have an ohm reading when the switch is up and no ohm reading when the switch is down. If this is not the case, replace the emergency stop switch.
 - b. If the ohm readings are correct and the display still says to release the emergency stop, replace the console.

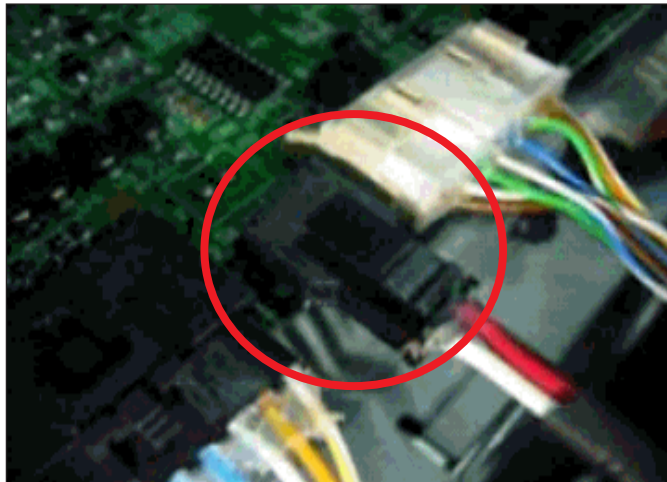


FIGURE A

8.10 TROUBLESHOOTING - DRIVE BELT NOISE

PROBLEM:

Noise is coming from the drive belt area.

SOLUTION:

- 1) Check to see if the front roller is grooved (Figure A).
 - a. Replace the grooved front roller with a smooth front roller (Figure B).
- 2) If a smooth roller is already installed on the unit:
 - a. Check to make sure that the drive belt spring is attached to the frame (re-attach if needed).
 - b. Lubricate the drive belt with a teflon based lubricant.
 - c. If the noise is still present after lubrication, replace the drive belt.

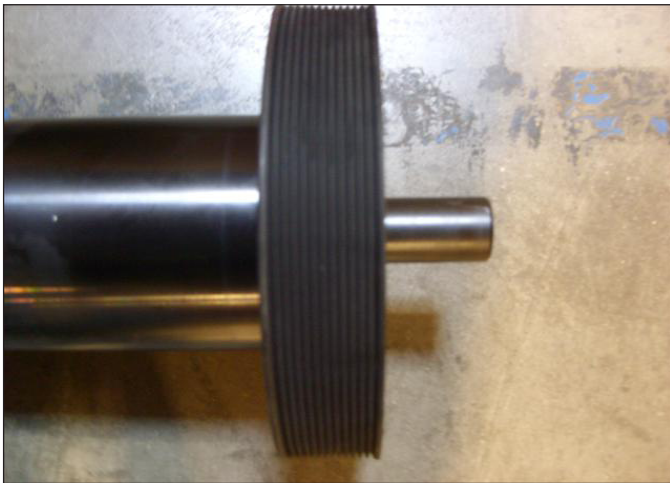


FIGURE A



FIGURE B

8.11 TROUBLESHOOTING - DISPLAY COLOR ISSUES

PROBLEM:

The display colors are off or there are a "rainbow" of colors on the display.

SOLUTION:

- 1) Check the console cable connections at the upper and lower control boards.
- 2) Check the choke wire connection (Figure A).
 - a. This wire connection should be taped in place, add tape if needed.
 - b. This wire should be tie strapped to the frame (Figure B). Add a tie strap if needed.

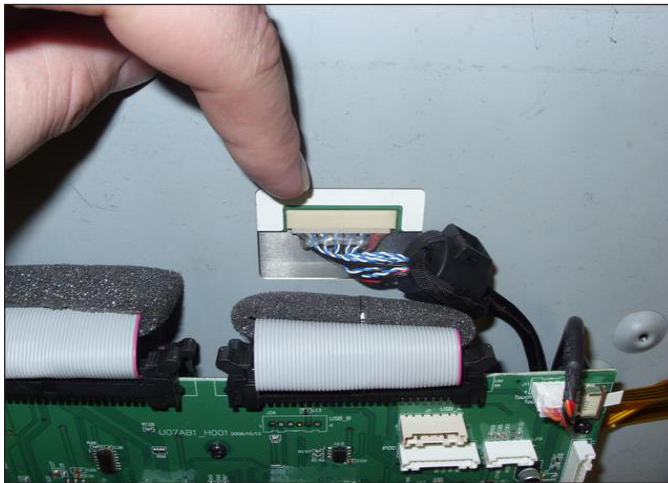


FIGURE A

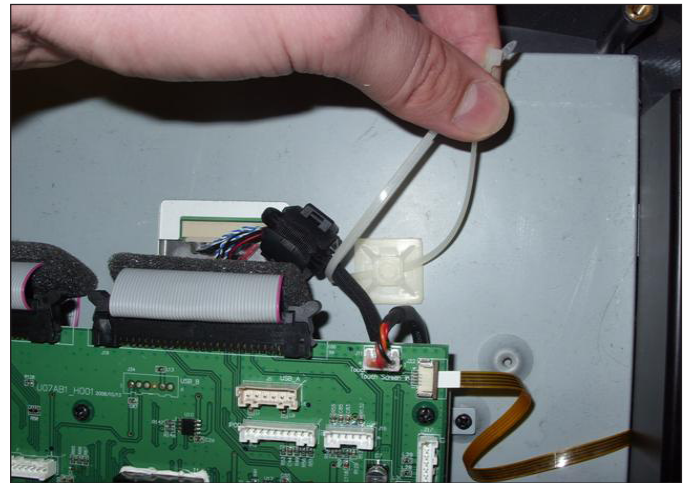


FIGURE B

CHAPTER 8: TROUBLESHOOTING

8.12.1 ENTERTAINMENT TROUBLESHOOTING - OVERVIEW



FIGURE A



FIGURE B



FIGURE C

1. This section will help with diagnosing problems with TV and entertainment related equipment that is produced by Matrix Fitness.
2. Verify that your TV is Matrix brand equipment. Compare your TV to the TVs in Figures A and B. Compare your controller to Figure C. If your equipment looks different contact Matrix or the manufacturer of your TV equipment if known.
3. For Matrix produced and mounted equipment you can use the information outlined in this section to help with any connection and power issues you may have. If you have questions that are specific to the TV alone (settings, programming, menu options, etc) please see the entertainment owner's manual.

CHAPTER 8: TROUBLESHOOTING

8.12.2 ENTERTAINMENT TROUBLESHOOTING – PICTURE FUZZY OR UNCLEAR



FIGURE A

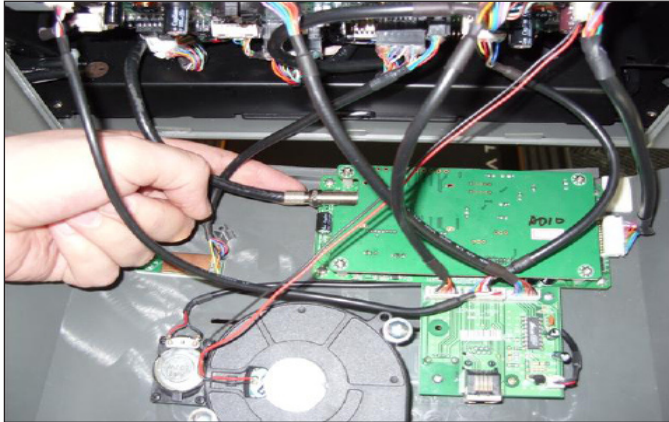


FIGURE B



FIGURE D

1. Using a verified good piece of coax cable (a good coax cable will have a signal strength of 10hz or greater), remove the console back cover (Figure A) and hook the coax directly to the TV jack. This bypasses internal connections for your machine (Figure B).
2. Check your internal cables and fittings inside your machine at the console (Figure B) and below the motor cover (Figures C & D). Make sure you have no damage (kinks, cuts etc) and no stray wires or poor fittings on the ends of the cables. Fittings should look like Figure E, with a clean flush connector and no stray aluminum strands touching the center conductor. Replace or repair any suspect cables.
3. If no damage can be found on cables, fittings, or connectors begin replacing cables and connectors with known good parts until the damaged part is found. It is also possible that the console tuner is damaged, replace as needed.

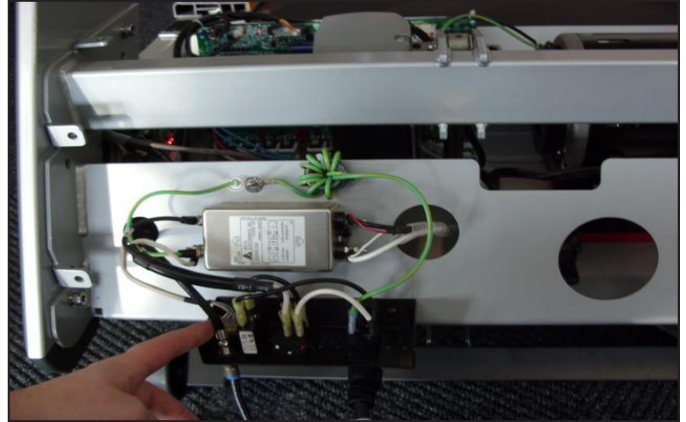


FIGURE C



FIGURE E

CHAPTER 8: TROUBLESHOOTING

8.12.3 ENTERTAINMENT TROUBLESHOOTING -TV WILL NOT TURN ON



FIGURE A

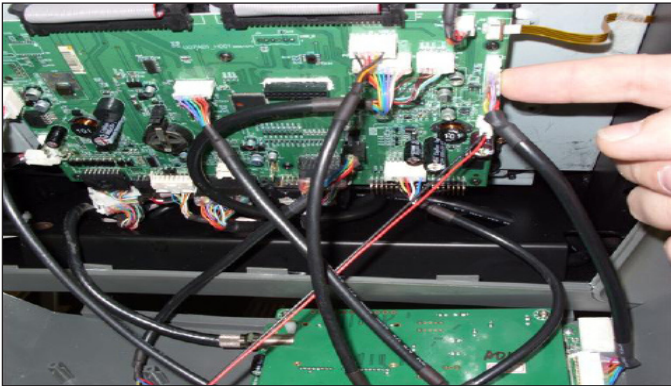


FIGURE B

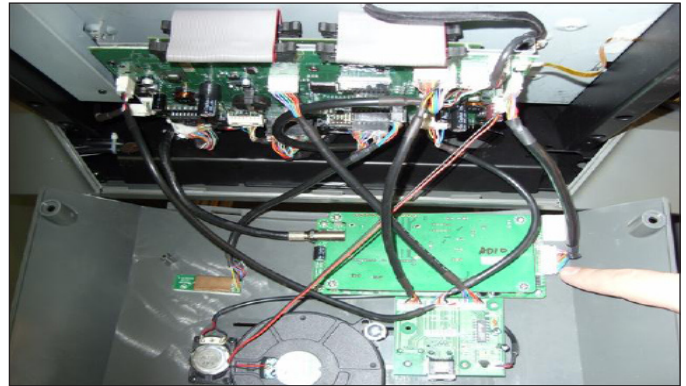


FIGURE C



FIGURE D

1. If you have no picture at all, check to see if you have any status lights on your controller (controller light is next to power button). The status light should be red when off or in standby mode, and green when the TV is powered on. If you have lights of any color skip to Section 8.7.4.
2. Remove the console back (Figure A) and check the electrical connections for the TV (Figures B & C).
3. After you have verified all connections are secure and problem still exists verify power at the outlet. (Figure D). If outlet is not outputting 120 Volts, check fitness room power.
4. If internal electrical connections are good, and the outlet is outputting 120 Volts, the issue is likely with the TV, contact Matrix.

CHAPTER 8: TROUBLESHOOTING

8.12.4 ENTERTAINMENT TROUBLESHOOTING - CONTROLLER ISSUES

1. If you have a status light on the controller but the On/Off button gives no response, disconnect and then reconnect the power to the treadmill from the wall. Attempt to turn on the TV again using the On/Off button.
2. If TV still does not power on, remove the console back (Figure A) and check the controller connections at the console (Figure B).
3. If the TV does not power on after the controller connections are reset, the issue is likely with the TV itself, contact Matrix.



FIGURE A

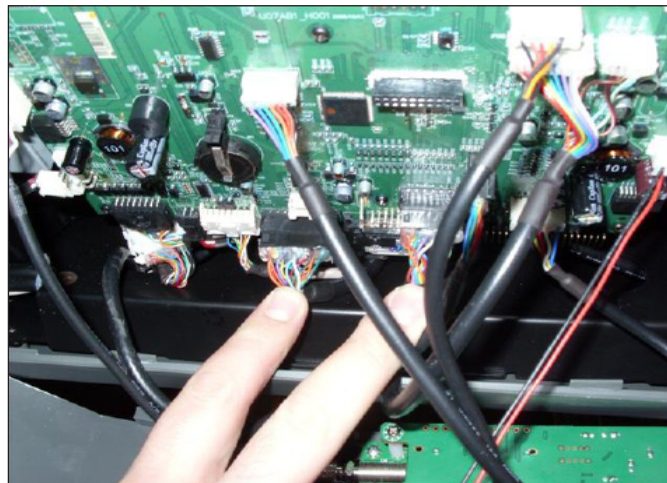


FIGURE B

CHAPTER 9: PART REPLACEMENT GUIDE

9.1 PLASTIC SHROUD REMOVAL

- 1) Remove the front shroud using a 6 mm Allen wrench (Figures A & B).
- 2) The shroud is split into two pieces. The upper shroud is held with two screws and velcro, the lower shroud is held with four screws.
- 3) Both covers are removed (Figure C).



FIGURE A



FIGURE B



FIGURE C

9.2 REAR ROLLER REMOVAL

- 1) Turn off power to the unit and disconnect the cord from the machine.
- 2) Remove one of the end caps using a Phillips screwdriver (Figure A).
- 3) Remove both roller adjustment screws using an 8 mm Allen wrench (Figure B).
- 4) Remove the roller from the running belt (Figures C & D).



FIGURE A

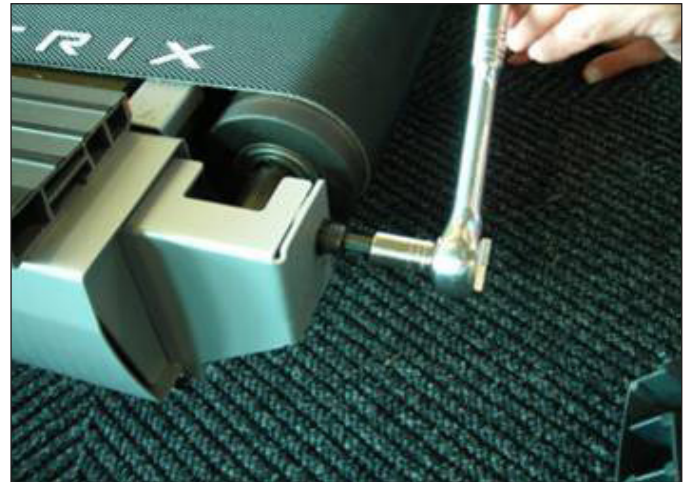


FIGURE B



FIGURE C



FIGURE D

CHAPTER 9: PART REPLACEMENT GUIDE

9.3 DECK REMOVAL

- 1) Remove the front shroud as outlined in Section 9.1.
- 2) Remove the four deck screws using a 5 mm Allen wrench (Figure A).
- 3) Remove the deck from the running belt (Figures B & C).
- 4) Be careful not to pinch fingers during removal / installation of deck board.
- 5) Deck is waxed on both sides so opposite side surface may be usable.
- 6) New deck surfaces must ALWAYS be matched to a new running belt.



FIGURE A



FIGURE B



FIGURE C

9.4 DECK CUSHION REMOVAL

- 1) Remove the deck as outlined in Section 9.3.
- 2) Holding the bolt with a 5 mm Allen wrench, loosen the nut with a 13 mm socket (Figure A & B).
- 3) For the rear cushion, hold the cushion and remove the 13 mm nut (Figure C).



FIGURE A



FIGURE B



FIGURE C

CHAPTER 9: PART REPLACEMENT GUIDE

9.5 FRONT ROLLER REMOVAL

- 1) Remove the front shrouds as outlined in Section 9.1.
- 2) Using a hook or loop of wire, remove the spring from the drive belt tensioner. The tensioner should now pivot away from the drive belt (Figures A & B).
- 3) Remove the front roller mounting screws using an 8 mm Allen wrench (Figures C & D).
- 4) Remove the drive belt from the front roller and remove the roller from the running belt (Figure E).



FIGURE A



FIGURE B

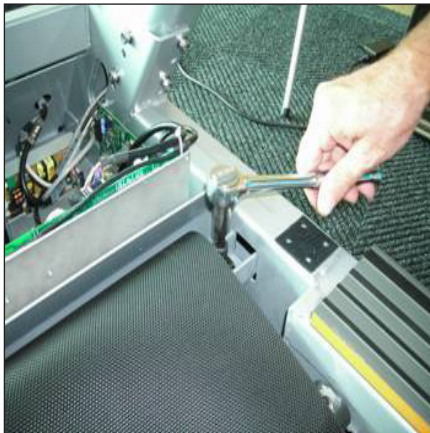


FIGURE C



FIGURE D



FIGURE E

CHAPTER 9: PART REPLACEMENT GUIDE

9.6 RUNNING BELT REMOVAL

- 1) Remove the front shrouds as outlined in Section 9.1.
- 2) Remove the rear roller as outlined in Section 9.2.
- 3) Remove the deck as outlined in Section 9.3.
- 4) Remove the front roller as outlined in Section 9.5.
- 5) Remove the running belt and replace with a new belt (Figures A & B).
- 6) New running belts should ALWAYS be installed on a new deck surface (deck should either be flipped or replaced to gain a new surface).

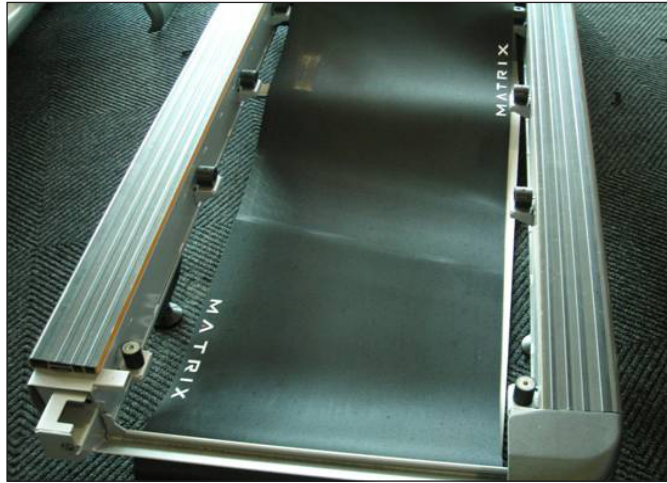


FIGURE A



FIGURE B

CHAPTER 9: PART REPLACEMENT GUIDE

9.7 SIDE RAIL REMOVAL

- 1) Remove the end cap using a Phillips screwdriver (Figure A).
- 2) Loosen the four screws under the frame using a 5 mm Allen wrench (Figure B).
- 3) Slide the rail off the back of the treadmill (Figures C & D).
- 4) After reinstalling the side rail, make sure the end cap is on first before tightening screws for proper gap spacing.
- 5) Be careful not to over tighten the screws, or they will poke through the top of the side rail.



FIGURE A



FIGURE B

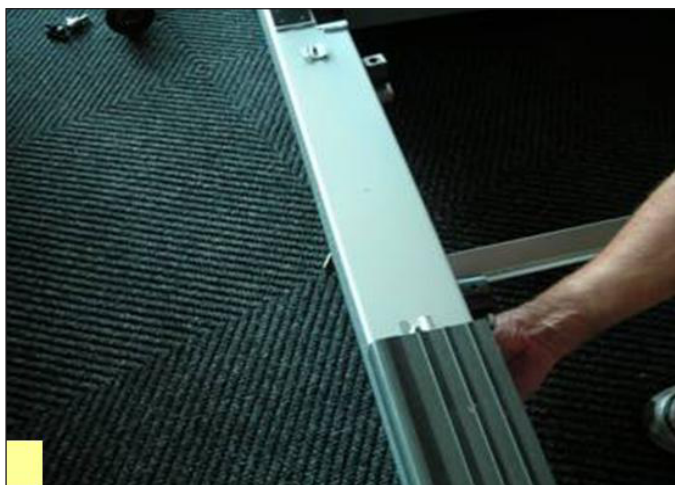


FIGURE C



FIGURE D

9.8 MOTOR CONTROL BOARD REMOVAL (MCB)

- 1) Turn off power to the unit and disconnect the cord from the machine.
- 2) Remove the front shrouds as outlined in Section 9.1.
- 3) Cut any wire ties that are secured to the MCB panel (Figure A).
- 4) Disconnect wires from the MCB - seven total connections (Figure B).
- 5) Remove the two MCB mounting screws using a Phillips head screwdriver (Figures C & D).
- 6) Auto Calibration must ALWAYS be run after replacing the MCB (see Section 3.6).

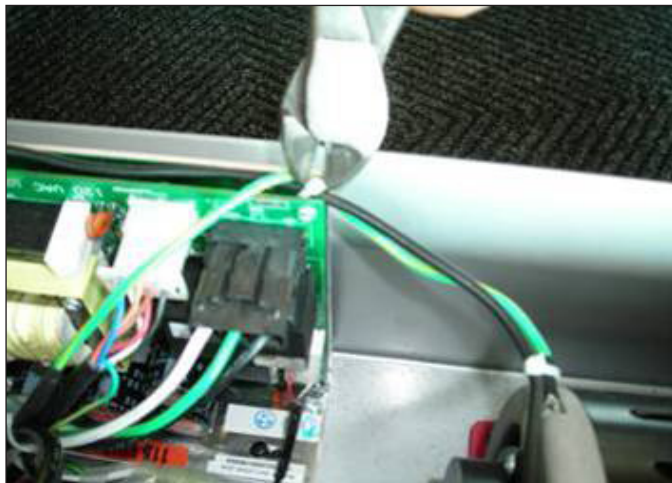


FIGURE A



FIGURE B

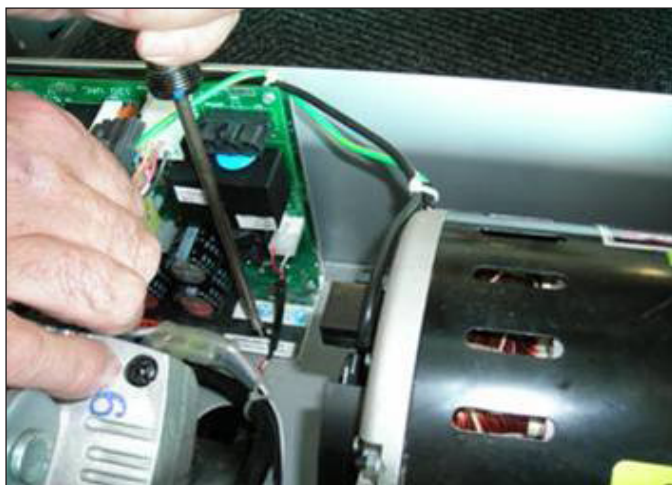


FIGURE C



FIGURE D

CHAPTER 9: PART REPLACEMENT GUIDE

9.9 MOTOR REMOVAL

- 1) Turn off power to the unit and disconnect the cord from the machine.
- 2) Remove the front shrouds as outlined in Section 9.1.
- 3) Release the drive belt tensioner as outlined in Section 9.5.
- 4) Disconnect the motor power cable from the MCB (Figure A).
- 5) Using an 8 mm Allen wrench, remove the four motor mounting screws (Figure B).
- 6) Lift the motor away from the treadmill (Figure C).
- 7) When reinstalling the motor, make sure the red vibration pad is in place (Figure D)
- 8) Auto Calibration must ALWAYS be run when installing a new motor. (see Section 3.6)

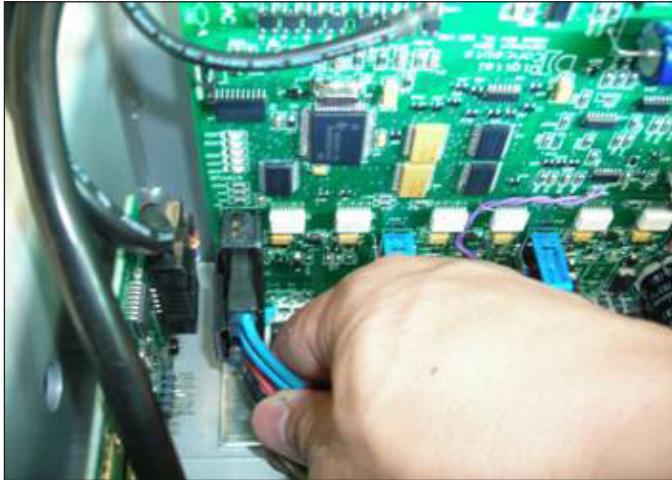


FIGURE A



FIGURE B



FIGURE C



FIGURE D

9.10 DRIVE BELT REPLACEMENT

- 1) Remove the front shrouds as outlined in Section 9.1.
- 2) Release the drive belt tensioner from drive belt as outlined in Section 9.5.
- 3) Remove the front roller screw on the drive belt side and loosen the screw on the opposite side (Figure A).
- 4) Lift the roller and remove the old drive belt (Figure B).
- 5) After installing the new belt, check it for correct alignment to the motor pulley before setting the tensioner in place.



FIGURE A

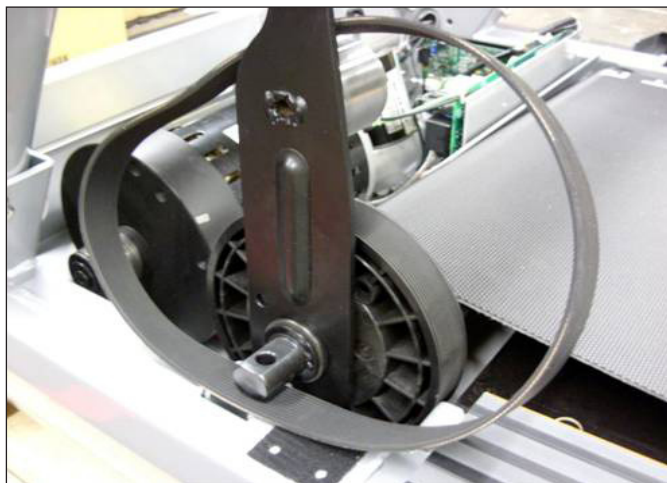


FIGURE B

CHAPTER 9: PART REPLACEMENT GUIDE

9.11 SPEED SENSOR REPLACEMENT

- 1) Turn off power to the unit and disconnect the cord from the machine.
- 2) Remove the front shrouds as outlined in Section 9.1.
- 3) Remove the speed sensor from the left side of the motor using a Phillips screwdriver (Figure A).
- 4) Cut the wire ties holding the speed sensor wire to the motor and MCB (Figures B & C).
- 5) Unplug the speed sensor from MCB (Figure D).
- 6) Auto Calibration must ALWAYS be run after installation of a new speed sensor (see Section 3.6).



FIGURE A

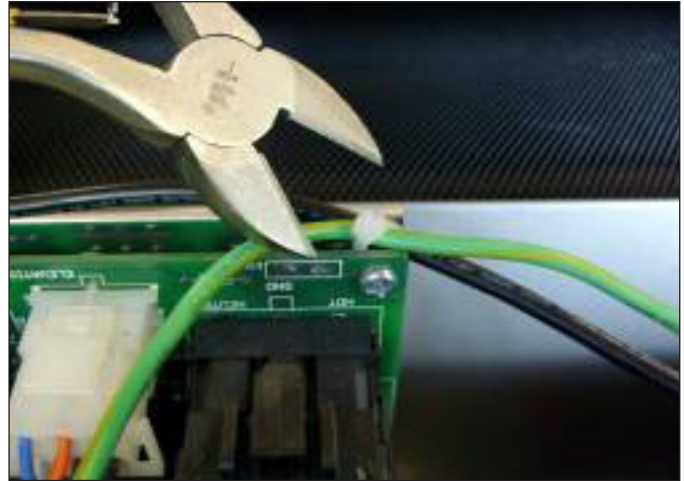


FIGURE B



FIGURE C

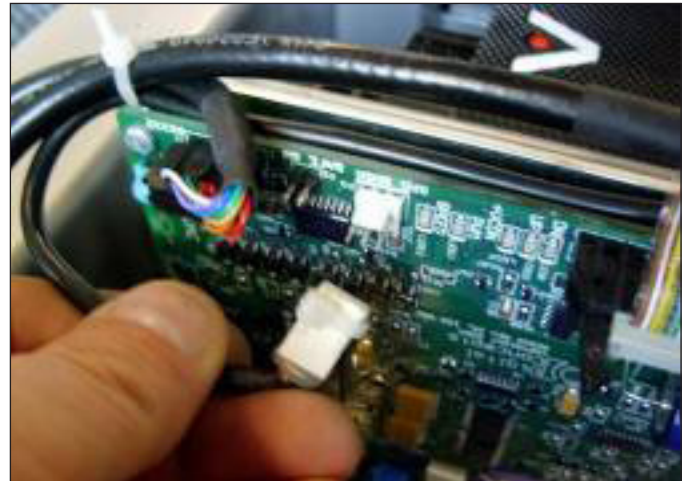


FIGURE D

CHAPTER 9: PART REPLACEMENT GUIDE

9.12 INCLINE MOTOR REMOVAL

- 1) Turn off power to the unit and disconnect the cord from the machine.
- 2) Lift the treadmill and support it so that the front wheels are off the floor, or the unit may be tipped on its side (Figure A).
- 3) Remove the clip from the pin attaching the incline motor to the rack (Figures B & C).
- 4) Disconnect the incline motor power cable from the MCB (Figure D).
- 5) Disconnect the pin from the incline motor (Figure E).
- 6) Lift the incline motor away from the treadmill (Figure F).
- 7) When installing the new incline motor, make sure to replace the white washers at the top and bottom (Figure G).
- 8) Auto Calibration must ALWAYS be run after replacing the incline motor (see Section 3.6).



FIGURE A



FIGURE B



FIGURE C

CHAPTER 9: PART REPLACEMENT GUIDE

9.12 INCLINE MOTOR REMOVAL - CONTINUED

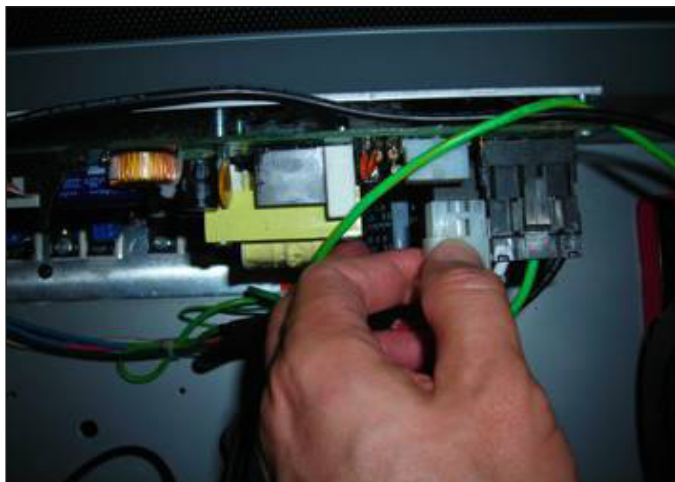


FIGURE D



FIGURE E



FIGURE F



FIGURE G

9.13 CONSOLE REPLACEMENT

- 1) Turn off power to the unit and disconnect the cord from the machine.
- 2) Remove the six 6 mm screws from underneath the console. There are arrows stamped in the plastic at the proper openings (Figure A).
- 3) Disconnect the wires from the console and set the console aside (Figure B).
- 4) Auto Calibration must ALWAYS be run after replacing the console (see Section 3.6).



FIGURE A



FIGURE B

CHAPTER 9: PART REPLACEMENT GUIDE

9.14 CONSOLE MAST ARM REPLACEMENT

- 1) Turn off power to the unit and disconnect the cord from the machine.
- 2) Remove the console as outlined in Section 9.13.
- 3) Take off the cup holder from the right side of the treadmill (Figure A).
- 4) Use a 6 mm Allen wrench to remove one screw and take off plastic hand rail (Figure B).
- 5) Remove the 5 Phillips screws and remove the right side upper plastic cover (Figures C, D, & E).
- 6) Cut the wire ties and begin to unthread the console cable (Figures F & G).
- 7) Remove the screws holding the console frame to the mast arms with a 6 mm Allen wrench in the openings with arrows (Figure H).
- 8) Lift the frame from the mast arms and set it aside (Figure I).
- 9) Use a 6 mm Allen wrench to remove the lower mast arm mounting screws (Figure J).
- 10) Pull the mast arm from the side of the machine (Figure K).
- 11) If replacing the right side mast arm, the console cable must be threaded through it.
- 12) Auto Calibration must ALWAYS be run after replacing the console mast (see Section 3.6).



FIGURE A



FIGURE B



FIGURE C



FIGURE D



FIGURE E

CHAPTER 9: PART REPLACEMENT GUIDE

9.14 CONSOLE MAST ARM REPLACEMENT - CONTINUED



FIGURE F



FIGURE G



FIGURE H



FIGURE I



FIGURE J



FIGURE K

CHAPTER 9: PART REPLACEMENT GUIDE

9.15 CONSOLE CABLE REPLACEMENT

- 1) Turn off power to the unit and disconnect the cord from the machine.
- 2) Remove the console as outlined in Section 9.13.
- 3) Take off the cup holder from the right side of the treadmill (Figure A).
- 4) Use a 6 mm Allen wrench to remove one screw and take off plastic hand rail (Figure B).
- 5) Remove the 5 Phillips screws and remove the right side upper plastic cover (Figures C, D, & E).
- 6) Cut the wire ties and begin to unthread the wire harness (Figures F & G).
- 7) Remove the spiral protective wrap from the top and bottom portion of the wire harness (Figures H & I).
- 8) Attach a pulling wire to the top of the defective console cable (Figure J).
- 9) Slowly remove the defective console cable starting at the bottom of the machine and pulling it up from the motor compartment (Figure K).
- 10) Attach the new console cable to the pulling wire and gently pull the new cable down through the machine.
- 11) Once the wire is in place, reinstall the spiral wrap and wire ties.
- 12) Auto Calibration must ALWAYS be run after the installation of a new console cable (see Section 3.6).



FIGURE A



FIGURE B



FIGURE C



FIGURE D



FIGURE E

CHAPTER 9: PART REPLACEMENT GUIDE

9.15 CONSOLE CABLE REPLACEMENT - CONTINUED



FIGURE F



FIGURE G



FIGURE H



FIGURE I



FIGURE J



FIGURE K

CHAPTER 9: PART REPLACEMENT GUIDE

9.16 HANDLE BAR SERVICE

- 1) Turn off power to the unit and disconnect the cord from the machine.
- 2) All items on the handle bar are removed using a Phillips screwdriver from the underside of the bar.
- 3) Once screws are removed, lift the part carefully and disconnect any wire connections to fully remove the handle bar.
- 4) Replace parts as needed on handle bar including the Quick Start Key, Resistance and Incline Toggles, and the Heart Rate Grip Plates (Figures A-F).



FIGURE A



FIGURE B



FIGURE C



FIGURE D



FIGURE E



FIGURE F

CHAPTER 9: PART REPLACEMENT GUIDE

9.17 EMERGENCY STOP SWITCH REPLACEMENT

- 1) Turn off power to the unit and disconnect the cord from the machine.
- 2) Remove the console as outlined in Section 9.13.
- 3) Use a Phillips screwdriver to remove two screws, one from each side of the red button (Figure A).
- 4) Lift the button from the bracket by pulling one side out at a time (Figure B).
- 5) Use a Phillips screwdriver to remove two screws, one from each side of the mounting bracket (Figure C).
- 6) Turn the bracket and use a straight screwdriver or pliers to compress each end of the switch and release it from the bracket (Figures D & E).
- 7) Make sure the new switch has the same orientation as the old one when installing, and that the wires are properly connected.



FIGURE A



FIGURE B



FIGURE C

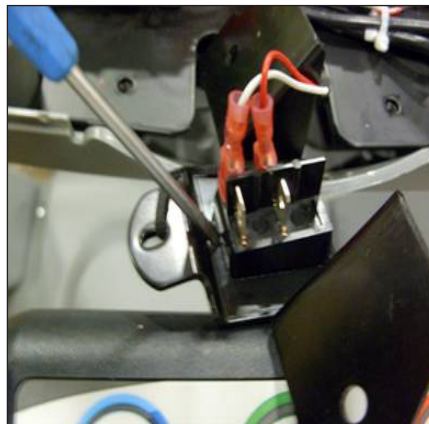


FIGURE D

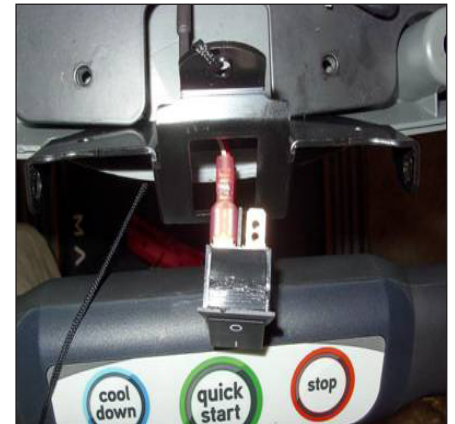


FIGURE E

CHAPTER 9: PART REPLACEMENT GUIDE

9.18 HEART RATE BOARD REPLACEMENT

- 1) Turn off power to the unit and disconnect the cord from the machine.
- 2) Remove the console as outlined in Section 9.13.
- 3) The Heart Rate Board is located in front of the red Emergency Stop button (Figure A).
- 4) Disconnect the wires from each side of the Heart Rate Board (Figure B).
- 5) Use a Phillips screwdriver to remove two screws, one from each side of the Heart Rate Board mounting bracket (Figure C).
- 6) Be sure to fully seat the wires on the new Heart Rate Board and test the grips after the console is reinstalled.

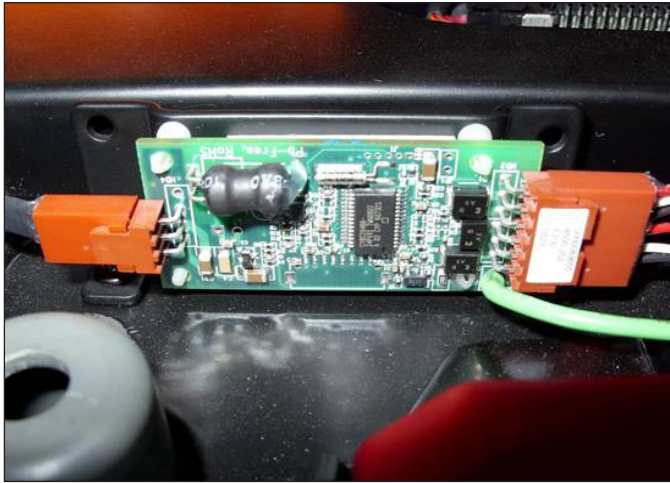


FIGURE A

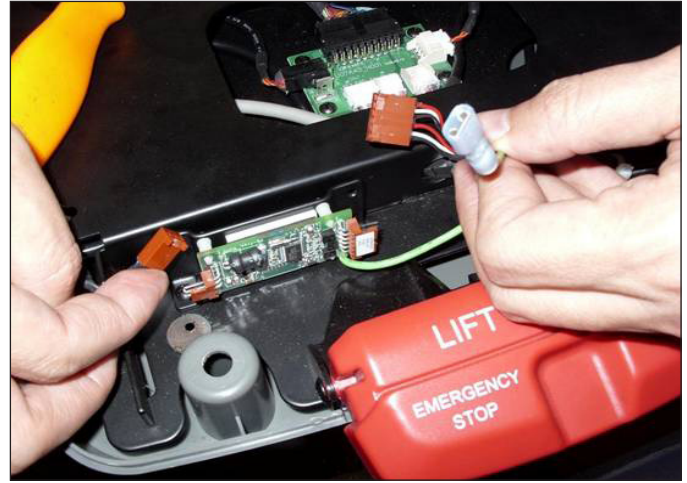


FIGURE B

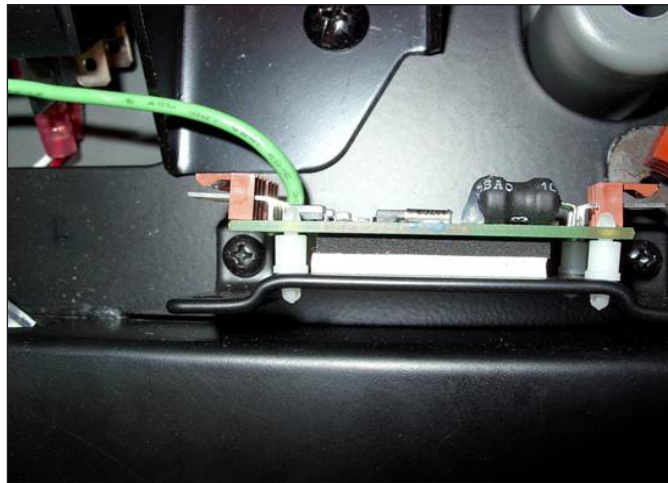


FIGURE C

CHAPTER 9: PART REPLACEMENT GUIDE

9.19 BLOWER MOTOR REMOVAL

- 1) Turn off power to the unit and disconnect the cord from the machine.
- 2) Remove the console as outlined in Section 9.13.
- 3) Lay the console face down and remove four screws using a Phillips screwdriver (Figure A).
- 4) The console shell will now separate. Unplug the wire connections from the main circuit board to completely split the front and rear sections (Figure B).
- 5) Use a Phillips screwdriver to remove two screws and washers holding the blower motor in place (Figure C).
- 6) Carefully separate the blower motor from the duct and connect the new motor. (Figure D).
- 7) Reinstall screws and washers, connect the wires to the main board, and reassemble the console halves.
- 8) Be sure to test the blower motor once the console is reinstalled.



FIGURE A



FIGURE B

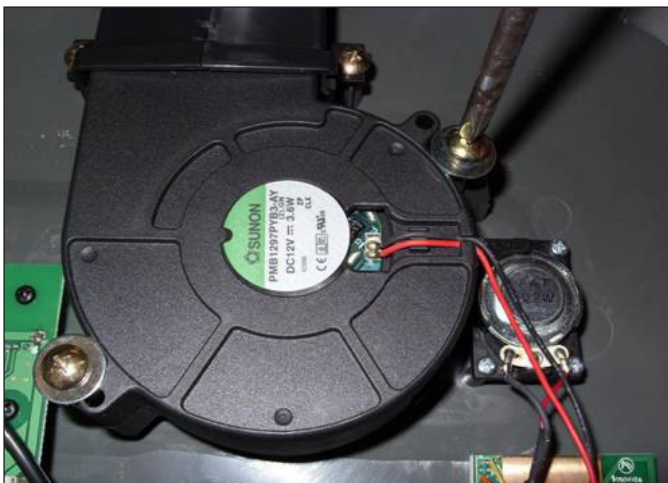


FIGURE C



FIGURE D

CHAPTER 10: TREADMILL SPECIFICATIONS AND ASSEMBLY GUIDE

10.1 TREADMILL SPECIFICATIONS






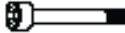











FEATURES	
Deck Type	Ultimate Hard-Wax reversible 1" deck
Belt Type	Habisat - 2 ply commercial grade
Running area	60" x 22"
Deck Step Height	9.5"
Cushion System	Ultimate Deck Cushioning System
Incline Range	0 - 15% (1,300 lb thrust incline motor)
Speed Range	0.5 - 15 mph / 0 - 24 km/h
Contact HR Sensors	Yes
Telemetric HR Receiver	Yes
Transport Wheels	Yes
DRIVE SYSTEM	
Motor	Matrix 5.0 hp AC Dynamic Response Drive System
Motor Controller	DCI Club Treadmill AC Drive
CONSOLE	
Display Type	15" Touch Screen LCD
Display Feedback	Time, Distance (kilometers or miles), Calories, Calories per Hour, Speed, Incline, Pace, Heart Rate, METS, Watts, Dynamic Profile Display, Static Profile Display.
User Defined Multi Language Display	Yes - English, German, French, Italian, Spanish, Dutch, Portuguese, Chinese, Japanese.
Workouts	Manual, Rolling Hills, Fat Burn, 5K, Target HR, Gerkin Protocol, Army PFT, Navy PRT, Marine PFT, Air Force PRT, Physical Efficiency Battery (PEB).
One-Button Quick Start	Yes
CSAFE, FitLinxx ready	Yes
Pause Function	Yes
On-the-fly program change	Yes
Fit Touch Technology	No
Integrated Vista Clear Digital Ready Television	Yes - 15" screen size.
Wireless Data Transmitter	Yes
iPod Compatible	Yes
Personal Fan	Yes
Crossbar Controls	Quick Start, Stop, Cool Down, Speed and Incline Control
Manager Mode	Resettable defaults with accumulated time and distance.

10.1 TREADMILL SPECIFICATIONS - CONTINUED

TECH SPECS	
Overall Dimensions	84"L x 33.25"W x 58"H
Maximum User Weight	400 lbs / 181.4 kg
Weight	378 lbs / 171 kg
Shipping Weight	487 lbs / 221 kg
Electrical Receptacle & Plug	NEMA 5-20R 120V
Electrical Receptacle & Plug	NEMA 6-20R 220V
Electrical Requirements	120 volt 20 amps-dedicated circuit required-non-looped grounded
Electrical Requirements	220 volt 10 amps-dedicated circuit required-non-looped grounded

CHAPTER 10: TREADMILL SPECIFICATIONS AND ASSEMBLY GUIDE

10.2 FASTENERS AND ASSEMBLY TOOLS

	Part #:	Part Name:	Outline:	Dimensions:	Quantity:	Bag Color:
10	020090-00	Socket head cap screw		M8 x 20mm	10	Black
14	0000086571	Flat Washer		6.2 x 12 x 1.6	10	Black
20	0000084935	Left Connection Bracket		SPHC 4.0T	1	
21	0000084936	Right Connection Bracket		SPHC 4.0T	1	
11	004541-AC	Socket Head Cap Screw		M8 x 1.25P x 45 mm	2	White
12	035882-AB	Socket Head Cap Screw		M8 x 1.25P x 75 mm	4	White
14	0000086571	Flat Washer		6.2 x 12 x 1.6T	6	White
17	004539-AD	Socket Head Cap Screw		M8 x 1.25P x 25mm	2	Blue
19	0000088905	Spacer		6.2 x 12.0 x 1.6	2	Blue
15	004859-AC	Button Socket Head Cap Screw		M8 x 1.25 x 20 mm	6	Red
14	0000086571	Flat Washer		6.2 x 12 x 1.6T	6	Red
13	020072-00	Socket Head Cap Screw		M8 x 1.25 x 60mm	4	Yellow
16	062769-00	Socket Head Cap Screw		M8 x 1.25 x 15mm	2	Yellow
23	0000089835	Ribbed Lock Washer		8.5 x 12.8 x .8/1.3H	6	Yellow
22	0000086284	Power Cord Holder		SPHC 1.6	1	Green
	002153-C	Power Cord			1	Green
18	004386-00	Button Head Screw		6.2 x 12.0 x 1.6T	2	Green

10.3 ASSEMBLY INSTRUCTIONS

ATTENTION

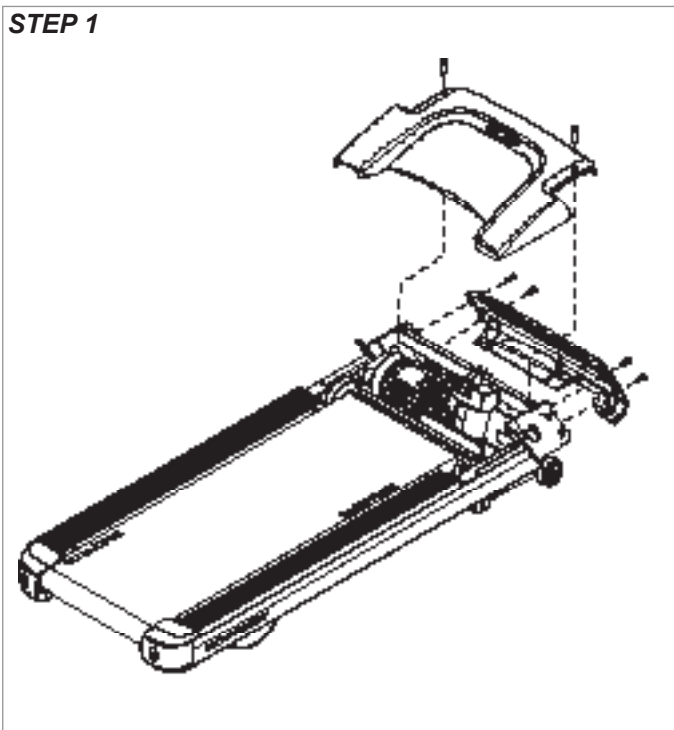
After assembly and installation is complete, the treadmill will need to be calibrated using the auto-calibration procedure outlined in Section 3.6. **DO NOT stand on the belt while the auto-calibration sequence is in progress.**

Prior to assembling the treadmill, unpack all of the contents of the box and make sure that all necessary components are present. Review the contents of the hardware package for completeness. Contact Matrix customer service at 866.693.4863 to report any missing items.

ASSEMBLY INSTRUCTIONS

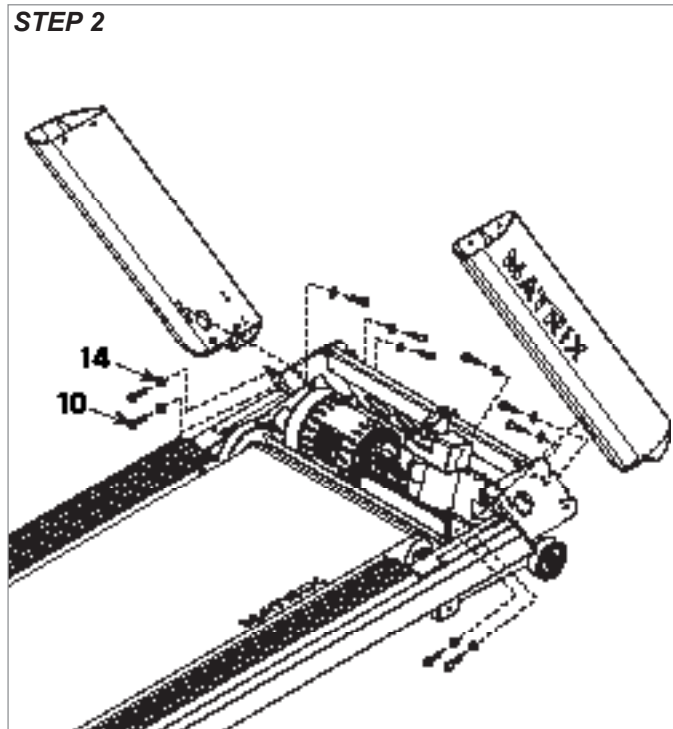
Please make sure that the power cord is not plugged into the wall outlet while completing the following procedure. To ensure correct assembly of the treadmill, carefully read and follow these steps:

STEP 1



Remove the motor cover(s) and set aside. The motor cover(s) need to be removed to gain access to the motor compartment so that wire harness connections can occur.

STEP 2

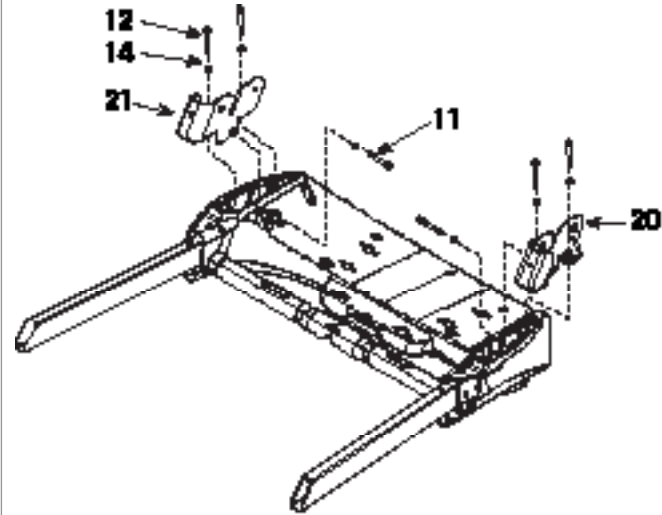


Open Black Assembly Bag. Assemble both the left and right console masts to the treadmill base using item 10 socket head cap screw and item 14 washer.

CHAPTER 10: TREADMILL SPECIFICATIONS AND ASSEMBLY GUIDE

10.3 ASSEMBLY INSTRUCTIONS - CONTINUED

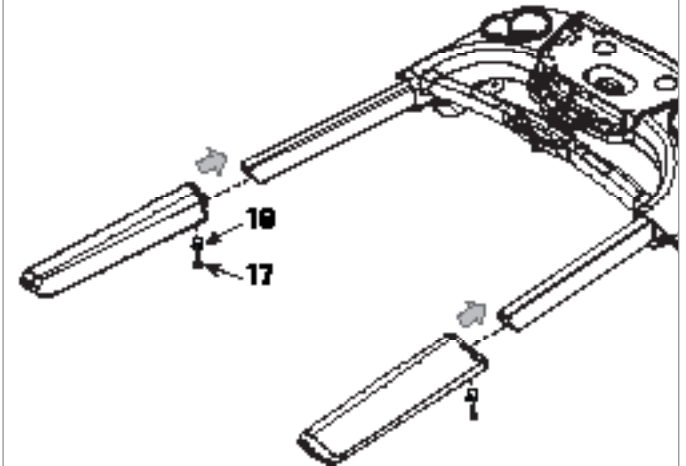
STEP 3



Open White Assembly Bag. Assemble the left and right bracket (items 20 and 21) to the console base using item 12 socket head cap screw, item 14 flat washer and item 11 socket head cap screw.

Assembly Tip: It is much easier to accomplish this task if the console base is left inside its shipping container.

STEP 4

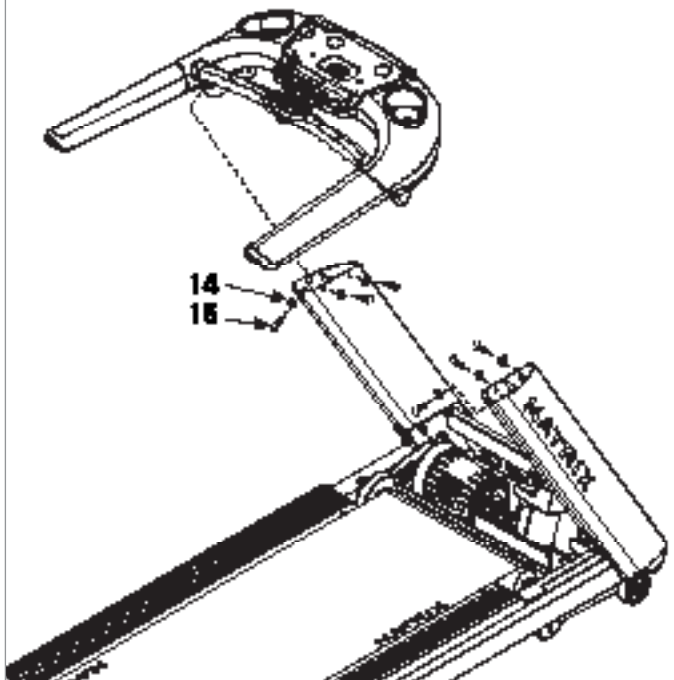


Open Blue Assembly Bag. Slide the urethane arms over the steel tubes on the console base. Fasten the urethane arms to the steel tubes using item 17 socket head cap screw and item 19 spacer.

CHAPTER 10: TREADMILL SPECIFICATIONS AND ASSEMBLY GUIDE

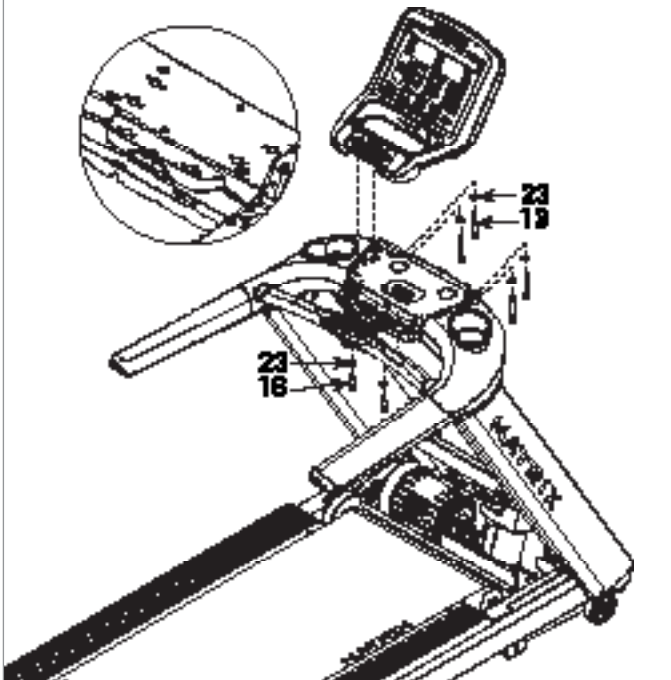
10.3 ASSEMBLY INSTRUCTIONS - CONTINUED

STEP 5



Open Red Assembly Bag. Assemble the console base to the console masts using item 15 button head cap screw and item 14 flat washer. Be sure to route the console cables down the console mast through the larger opening in the mast which is closest to the running belt. Make all appropriate wire connections within the motor compartment.

STEP 6

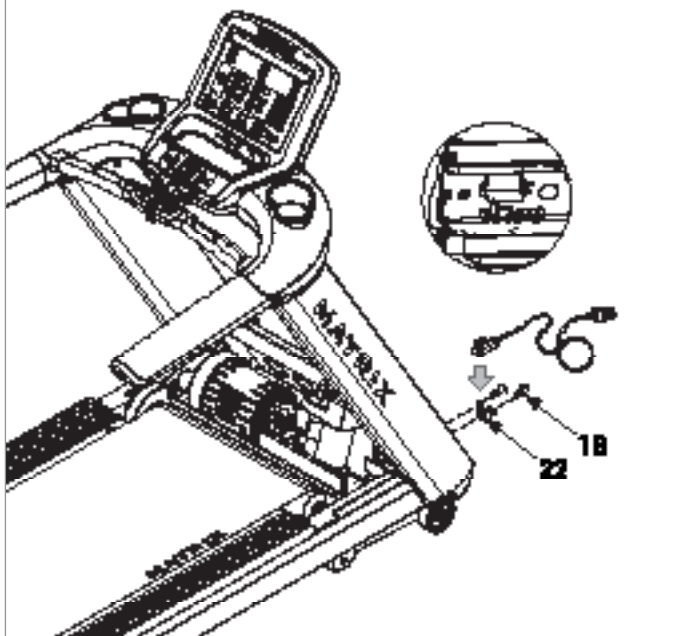


Open Yellow Assembly Bag. Make appropriate wire connections to the faceplate and then assemble to the console base using item 13 socket head cap screw, item 23 lock washers, and item 16 socket head cap screw. Item 16 is a shorter socket head cap screw and gets assembled into the holes closest to the running surface. All holes applicable to the assembly step can be noted by the embossed arrow next to the hole.

CHAPTER 10: TREADMILL SPECIFICATIONS AND ASSEMBLY GUIDE

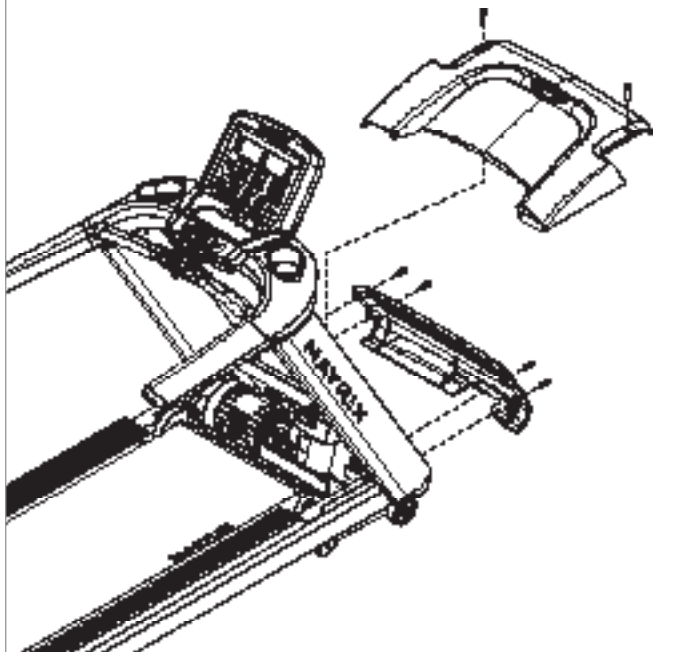
10.3 ASSEMBLY INSTRUCTIONS - CONTINUED

STEP 7



Open Green Assembly Bag. Install the power cord and assemble item 18 power cord holder with item 22 button head screw. If your hardware pack is missing item 22, check to see if the screws are already assembled on the treadmill.

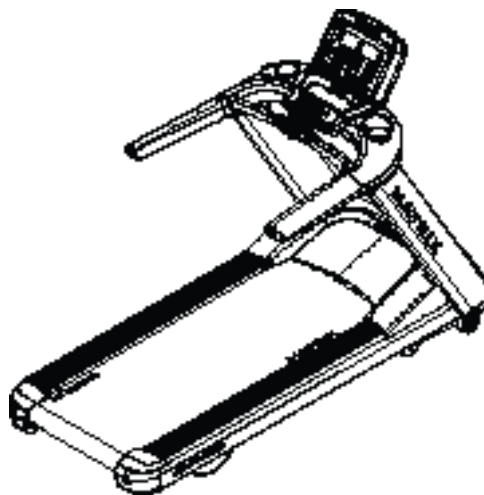
STEP 8



Replace the motor cover(s) and power the treadmill on. The power button is located next to the power cord inlet.

ASSEMBLY COMPLETE

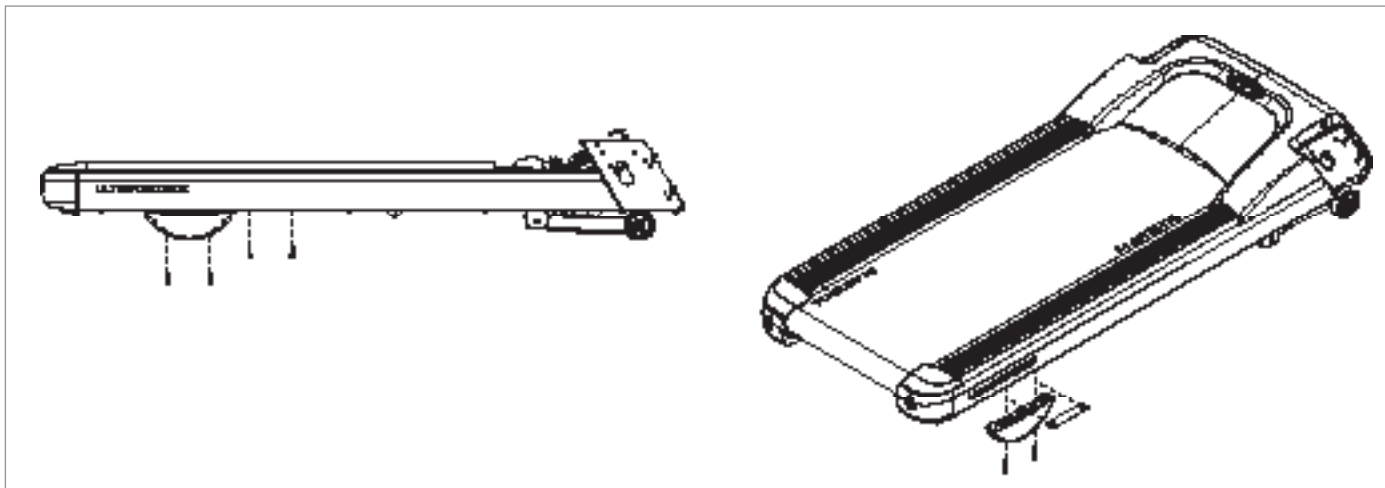
Assembly is complete, the running belt should be adjusted as needed and the auto calibration sequence must now be run as outlined in Sections 3.6 and 3.7. Also the treadmill should be leveled and the console and platform serial numbers should be entered into the console as outlined in Section 10.4 and 10.5.



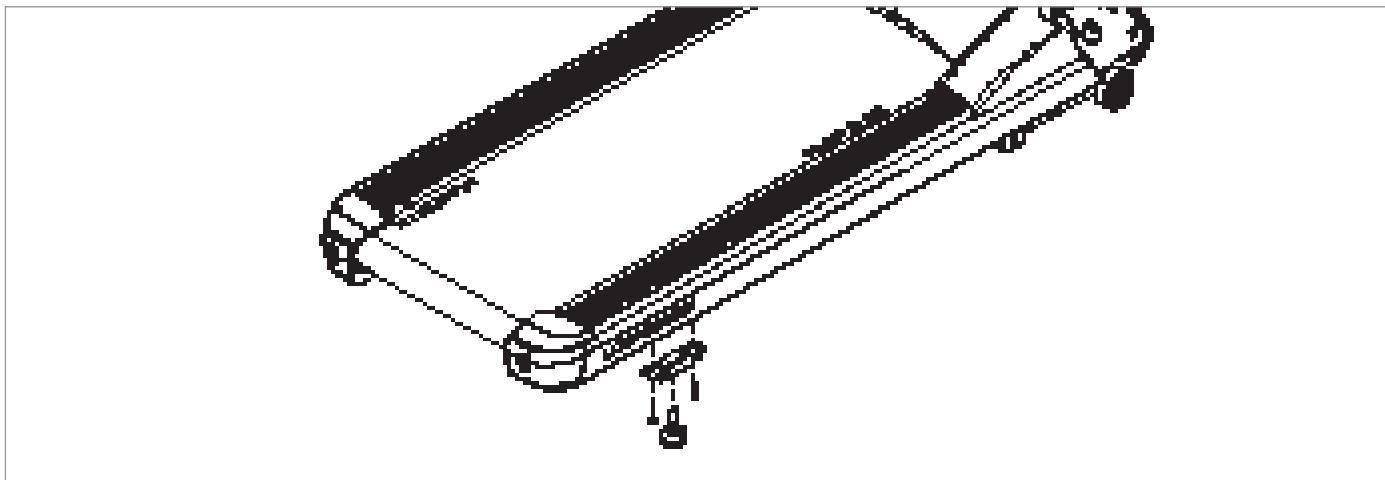
10.4 LEVELING THE TREADMILL

OPTIONAL LEVELING ASSEMBLY TECHNIQUES: USE OF SHIM OR BY ADDING A LEVELING FOOT.

Note: It is extremely important that the levelers are correctly adjusted for proper operation. An unbalanced unit may cause belt misalignment or other issues. Use of a level is recommended.



Remove the leveling shim provided on the underside of the treadmill. The shim can be found mounted on the underside of the right hand side rail. Remove the rear foot on the side of the treadmill that is resting low. Install the shim as shown above and return the rear foot.



When installing the optional rear leveling foot accessory, remove the existing rear foot. Replace with new leveling foot and fasten to the frame using the existing fasteners that held in the half-moon foot.

CHAPTER 10: TREADMILL SPECIFICATIONS AND ASSEMBLY GUIDE

10.5 ENTERING THE SERIAL NUMBER INTO THE CONSOLE

ONCE INSTALLATION IS COMPLETE, THE CONSOLE AND PLATFORM SERIAL NUMBERS SHOULD BE ENTERED INTO THE CONSOLE.

- 1) Press ENTER, 3, 0, 0, 1, ENTER on the number keypad and Service Mode will appear on the display.
- 2) Press Serial Number on the display.
- 3) Choose Platform (Figure A) or Console (Figure B).
- 4) Enter the serial number of the console or platform using the number keypad. Only the final 9 digits of the serial number should be entered.
- 5) Repeat this procedure so that both the console and platform serial numbers are entered.
- 6) Press the EMERGENCY STOP or the HOME key to return to normal function.

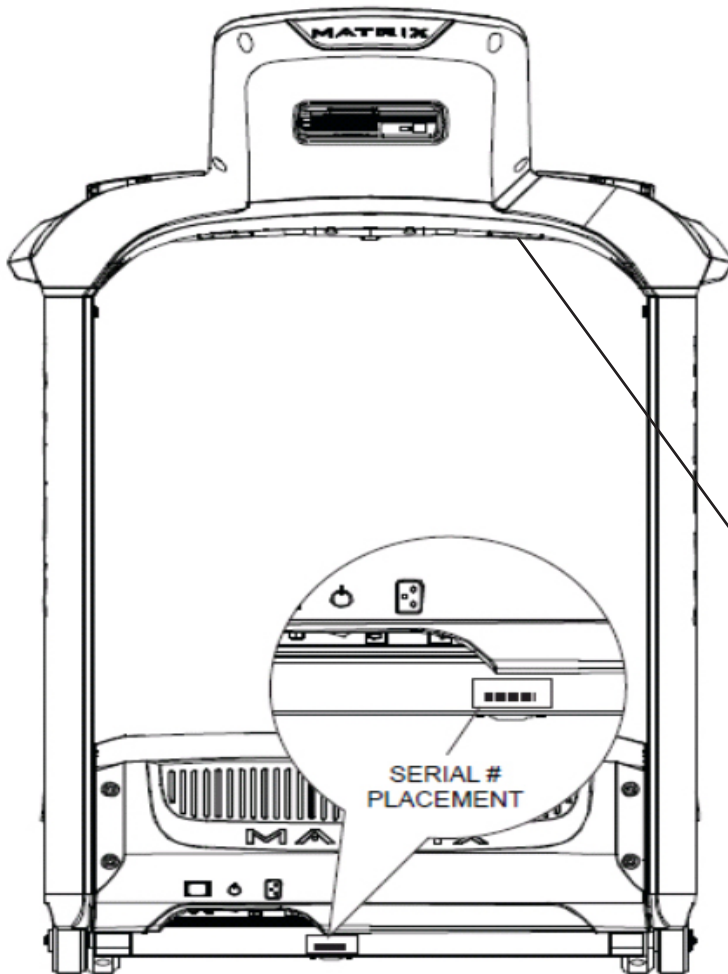


FIGURE A



FIGURE B

CHAPTER 10: TREADMILL SPECIFICATIONS AND ASSEMBLY GUIDE

10.6 TV PROGRAMMING INSTRUCTIONS

- 1) Press ENTER, 1, 0, 0, 1, ENTER on the number keypad and Manager Mode will appear on the display.
- 2) Press TV on the display (Figure A).
- 3) Press Setup on the display and a TV will appear in the top right corner (Figure B).
- 4) Press the - key on the number keypad and a Menu will appear on the TV (Figure C).
- 5) Use the volume keys to move horizontally in the Menu and the channel keys to move up or down. NOTE: You must press buttons quickly in the Menu or it will minimize within 5 seconds.
- 6) Move the cursor over to Channel on the top right of the Menu (Figure D), and go down to CHANNEL SCAN, use the volume button to select it (Figure E).
- 7) Move the cursor down to START TO SCAN and use the volume button to select it (Figure F).
- 8) If the channels are now coming in clearly, press the HOME key to return to normal operation (Figure G).
- 9) If the channels still are not coming in, or are showing in black and white, return to CHANNEL SCAN, and then change the CABLE SYSTEM to match your incoming cable frequency (Figure H). Reselect START TO SCAN once this has been changed.
- 10) If the channels are still not coming in clearly, refer to the TV Troubleshooting in Section 8.7.2.



FIGURE A



FIGURE B



FIGURE C



FIGURE D

CHAPTER 10: TREADMILL SPECIFICATIONS AND ASSEMBLY GUIDE

10.6 TV PROGRAMMING INSTRUCTIONS - CONTINUED



FIGURE E



FIGURE F



FIGURE G



FIGURE H

CHAPTER 11: SOFTWARE UPGRADE INSTRUCTIONS

11.1 SOFTWARE UPGRADE INSTRUCTIONS

- 1) Three files should be present on the USB drive. These are T7xe Deploy.cab, io.txt, and update.config..
- 2) Turn on the treadmill power, and then wait until the standard display picture comes up (Figure A).
- 3) Insert the USB drive into the "REPROGRAM PORT" of the T7xe console back cover (Figure B).
- 4) After a few seconds, the treadmill will auto run the upgrade processing. The achieved percentage of the scheduled process will be displayed in the bottom right corner of the display (Figure C).
- 5) When the update is complete, the display will ask you to remove the USB drive (Figure D). Once the USB drive is removed, turn off the treadmill, wait 10 seconds, then turn on the treadmill. The standard display picture will come up (Figure A).
- 6) Press "ENTER 1001 ENTER" to enter the Manager Mode on the treadmill. Then touch "SOFTWARE VERSION" to double check the new software version (Figure E).
- 7) All of the software version information will now be displayed on the screen (Figure F).

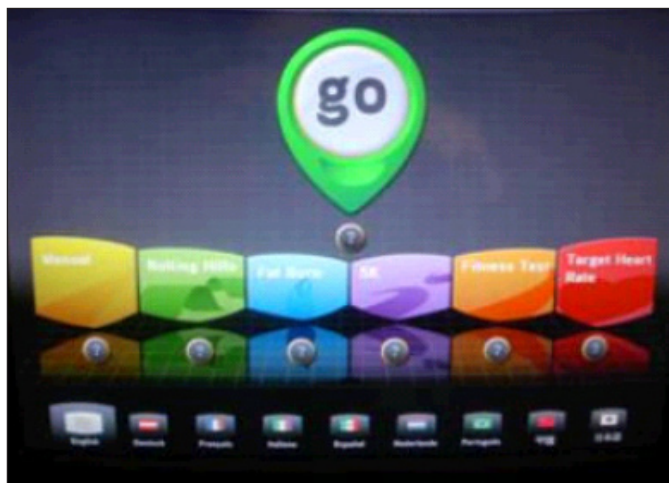


FIGURE A



FIGURE B

CHAPTER 11: SOFTWARE UPGRADE INSTRUCTIONS

11.1 SOFTWARE UPGRADE INSTRUCTIONS - CONTINUED

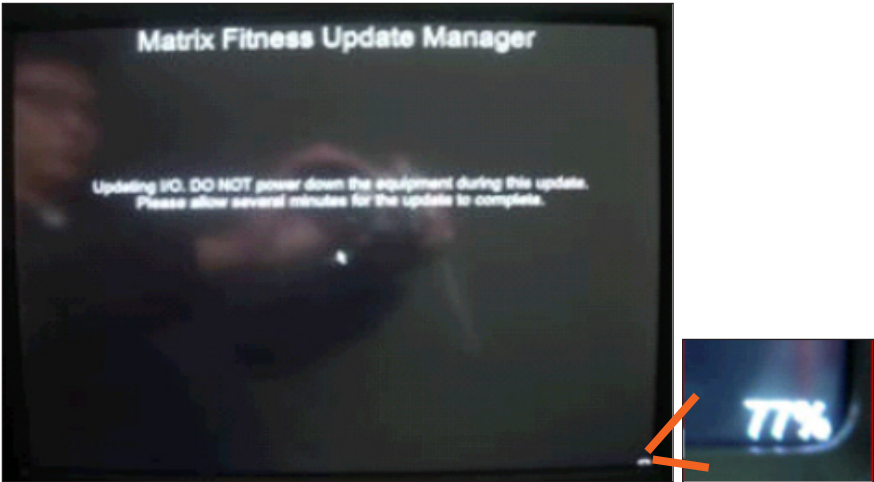


FIGURE C

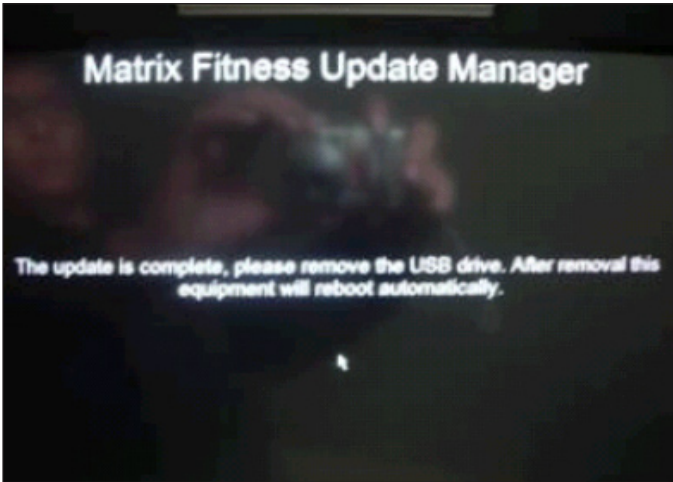


FIGURE D

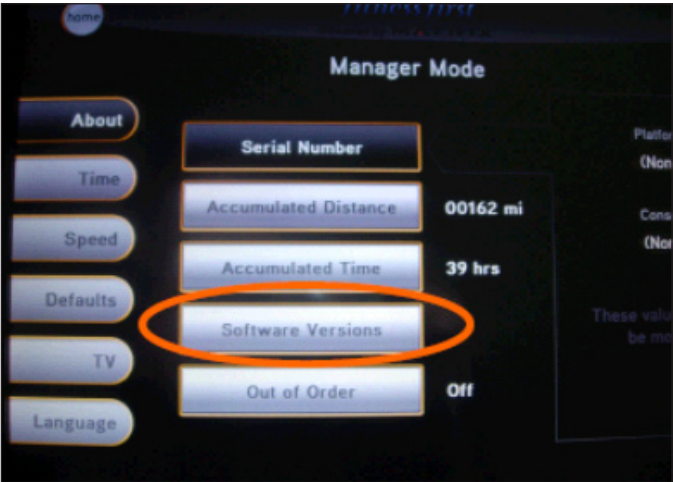


FIGURE E



FIGURE F

NOTES



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